



City and Port of Cardiff

ANNUAL REPORT

FOR 1933

OF THE

Medical Officer of Health and
School Medical Officer

CARDIFF:
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CONTENTS.

	PAGE.
COMMITTEES	v
STAFF	vii
PREFACE	ix
EXPENDITURE, 1932-33	xv

GENERAL HEALTH SERVICE.

I. SUMMARY OF GENERAL AND VITAL STATISTICS	1
II. AREA AND POPULATION:—	
Area	2
Population	2
III. BIRTHS	3
IV. DEATHS:—	
Deaths from All Causes	4
Cancer	7
Deaths from Road Accidents	7
Maternal Mortality	8
Infant Mortality	9
V. NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS)	11
Smallpox	12
Vaccination	12
Scarlet Fever	13
Diphtheria	13
Active Immunization	14
Enteric Fever	14
Ophthalmia Neonatorum	14
Food Poisoning	14
VI. NON-NOTIFIABLE INFECTIOUS DISEASES:—	
Measles	14
Whooping Cough	15
Diarrhoea	15
Influenza... ..	16
Home Nursing of Pneumonia	16
VII. CARDIFF ISOLATION HOSPITAL	16
VIII. LORD PONTYPRIDD HOSPITAL	22
IX. LLANDOUGH HOSPITAL... ..	25
X. POOR LAW MEDICAL SERVICE	28
XI. HOSPITAL ACCOMMODATION	32
XII. TUBERCULOSIS:—	
New Cases	33
Sources of Ascertainment	33
Home Conditions	34
Known Cases	35
Deaths	36
Treatment	37
XIII. VENEREAL DISEASES	41

XIV.	MATERNITY AND CHILD WELFARE :—				
	Notification of Births and Still-births	...	...	...	45
	Child Welfare Consultations	...	...	...	45
	Ante-natal Consultations	...	...	...	46
	Maternity Hospital	...	...	...	48
	Maternity and Nursing Homes	...	...	...	48
	Extra-Domiciliary Confinement	...	...	...	48
	Dental Clinic	...	...	...	48
	Domiciliary Visits by Health Visitors	...	...	...	49
	Milk for Mothers and Children	...	...	...	49
	Training of Midwives	...	...	...	50
	Midwives Practising in Cardiff	...	...	...	50
	Medical Practitioners called in by Midwives	...	...	...	50
	Puerperal Fever and Puerperal Pyrexia	...	...	...	51
	Home Nursing	...	...	...	51
	Maternity Bags	...	...	...	52
	Home Helps	...	...	...	52
	Crippling Defects and Orthopaedics	...	...	...	52
	Nose and Throat Defects	...	...	...	53
	Visual Defects	...	...	...	53
	Measles	...	...	...	54
	Veneral Diseases	...	...	...	54
	Radiography	...	...	...	54
	Artificial Sunlight Treatment	...	...	...	54
	Infant Life Protection	...	...	...	54
	Adoption of Children Act	...	...	...	55
XV.	LABORATORY WORK :—				
	Cardiff and County Public Health Laboratory	...	...	...	55
XVI.	HOUSING :—				
	Housing Statistics	...	...	...	56
	House Inspection	...	...	...	57
	Multiple Tenancy	...	...	...	57
	Housing Act, 1930	...	...	...	57
	Corporation Housing Estates	...	...	...	58
	Houses-Let-in-Lodgings	...	...	...	58
XVII.	FOOD INSPECTION :—				
	Meat Inspection at Municipal Abattoirs	...	...	...	59
	Meat Inspection at Private Slaughter-houses	...	...	...	60
	Unsound Food Exposed or Intended for Sale	...	...	...	60
	Meat Hawkers	...	...	...	61
	Milk Inspection	...	...	...	61
	Veterinary Inspection of Cows	...	...	...	62
	Tubercle Bacilli in Milk	...	...	...	62
	Routine Bacteriological Examination of Milk	...	...	...	62
	Graded Milks	...	...	...	63
	Ice Cream	...	...	...	64
	Legal Proceedings...	...	...	...	64
	Report of the Public Analyst	...	...	...	64
XVIII.	GENERAL SANITATION :—				
	General Sanitary Inspection	...	...	...	73
	Nuisances Abated, Repairs Executed, etc.	...	...	...	74
	Water Supply	...	...	...	77
	Drainage and Sewerage	...	...	...	77
	Choked and Defective Drains	...	...	...	77

XVIII.	GENERAL SANITATION (contd.):—						
	Flushing Cisterns	...	...	...	...	...	77
	Conservancy System Closets	...	...	...	...	...	78
	Cesspools	...	...	...	...	...	78
	Open-Air Swimming Baths and Roath Park Lake	...	...	...	...	...	78
	Rat Destruction	...	...	...	...	...	78
	Factories, Workshops and Workplaces	...	...	...	...	...	78
	Shops	...	...	...	...	...	80
	Legal Proceedings...	...	...	...	...	...	80
	Disinfection	...	...	...	...	...	80
	Cleansing Station	...	...	...	...	...	80
	Public Mortuary	...	...	...	...	...	80
XIX.	ATMOSPHERIC POLLUTION	...	...	...	...	...	81
XX.	METEOROLOGICAL OBSERVATIONS	...	...	...	...	...	82

PORT SANITARY SERVICE.

I.	SHIPPING ENTERING THE PORT:—						
	Arrivals and Tonnage	...	...	...	...	...	85
	Vessels Inspected	...	...	...	...	...	85
	Vessels dealt with Monthly	...	...	...	...	...	86
	Nationality of Vessels	...	...	...	...	...	86
II.	CHARACTER OF TRADE:—						
	Passenger Traffic	...	...	...	...	...	86
	Cargo Traffic	...	...	...	...	...	86
III.	WATER SUPPLY	...	...	...	...	...	87
IV.	PORT SANITARY REGULATIONS, 1933:—						
	Operation of the Regulations	...	...	...	...	...	87
	Wireless Installations	...	...	...	...	...	89
	Cases of Infectious Disease landed from Vessels	...	...	...	...	...	90
	Other Cases of Infectious Disease	...	...	...	...	...	90
	Cases of Infectious Disease occurring on Vessels during the Voyage	...	...	...	...	...	91
	Cleansing and Disinfection...	...	...	...	...	...	91
	Venereal Disease	...	...	...	...	...	91
	Psittacosis	...	...	...	...	...	91
V.	MEASURES AGAINST RODENTS	...	...	...	...	...	92
VI.	HYGIENE OF CREWS' SPACES, ETC.	...	...	...	...	...	95
VII.	FOOD INSPECTION, ETC.	...	...	...	...	...	96
VIII.	MISCELLANEOUS:—						
	Medical Inspection of Aliens	...	...	...	...	...	98
	Diseases of Animals Acts, etc.	...	...	...	...	...	98
	Canal Boats	...	...	...	...	...	98

SCHOOL MEDICAL SERVICE.

I.	STAFF	...	...	...	...	...	99
II.	CO-ORDINATION	...	...	...	...	...	99
III.	SCHOOL HYGIENE	...	...	...	...	...	99
IV.	MEDICAL INSPECTION	...	...	...	...	...	99

	PAGE.
V. FINDINGS OF MEDICAL INSPECTION	100
Average Heights and Weights	100
Entrants... ..	101
Re-inspection of Children found Defective	102
VI. "FOLLOWING UP" AND THE WORK OF SCHOOL NURSES	103
VII. ARRANGEMENTS FOR TREATMENT:—	
Malnutrition	104
Uncleanliness	104
Minor Ailments and Diseases of the Skin	104
Visual Defects and External Eye Disease	104
Nose and Throat Defects	105
Ear Disease and Defective Hearing	105
Dental Defects	105
Orthopaedic and Postural Defects	105
Heart Disease and Rheumatism	107
Tuberculosis	107
Other Defects and Diseases... ..	107
Radiography	107
VIII. INFECTIOUS DISEASES	108
IX. OPEN-AIR EDUCATION	109
X. PHYSICAL TRAINING	109
XI. PROVISION OF MEALS	109
XII. CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES	110
XIII. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN	111
Mentally Defective Children	111
Mentally Retarded Children	112
Special Schools	112
Greenhill Open-Air School	112
XIV. FULL-TIME COURSES OF HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS	113
XV. NURSERY SCHOOLS	113
XVI. SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION	113
XVII. PARENTS' PAYMENTS	113
XVIII. HEALTH EDUCATION	114
XIX. SPECIAL INQUIRIES	114
XX. MISCELLANEOUS:—	
Medical Examination of Teachers	114
Juvenile Employment	114
Special Classes for Speech Training	114
XXI. STATISTICAL TABLES:—	
Elementary Schools	115
Secondary and High Schools	123

MENTAL DEFICIENCY SERVICE.

ANNUAL REPORT	128
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CITY OF CARDIFF.

Health Committee.

THE LORD MAYOR (Alderman A. E. GOUGH, J.P.)*†‡

Chairman:

Alderman JOHN DONOVAN, C.B.E., J.P.*†‡

Deputy Chairman:

Councillor JAMES GRIFFITHS, J.P.*†‡

Alderman W. GREY, J.P.*	Councillor ABRAHAM LEWIS†‡
Alderman C. W. MELHUISH, J.P.*†‡	„ H. E. WHITE†‡
Councillor O. C. PURNELL, J.P.*	„ A. J. BEECHER†‡
„ T. J. MULLINS†‡	„ D. T. WILLIAMS†‡
„ W. R. WILLS*	„ F. CHAPMAN*
„ R. G. ROBINSON†‡	„ A. J. MARTIN†‡

Hospitals Sub-Committee.

The Health Committee with the following co-opted members:

Dr. R. ARMSTRONG.
Dr. D. A. POWELL.
Dr. J. D. WILLIAMS.

Lord Pontypridd Hospital Visiting Sub-Committee.

Members of the Health Committee whose names are marked * with the following co-opted members:

Mr. CHARLES THOMPSON, J.P.
Mr. HERBERT M. THOMPSON, J.P.

Maternity, Child Welfare and Tuberculosis Sub-Committee.

Members of the Health Committee whose names are marked † with the following co-opted members:

Mrs. A. KERRIGAN.
Mrs. E. THOMAS.
Mrs. M. S. STEWART, J.P.

Sanitary Services Sub-Committee.

Members of the Health Committee whose names are marked thus ‡.

Special Services Committee of the Education Committee.

Chairman:

Alderman Sir W. R. WILLIAMS, J.P.

Deputy Chairman:

Councillor H. E. WHITE.

Alderman W. GREY, J.P.	Councillor T. J. MULLINS.
Alderman G. FRED EVANS.	„ MORGAN DAVIES, J.P.
Councillor H. HILES, J.P.	„ J. P. COLLINS.
„ O. C. PURNELL, J.P.	„ C. G. MORELAND.
„ W. G. HOWELL.	„ G. F. B. FREWER.
„ C. H. McCALE.	„ T. G. LEYSHON.
„ J. HELLYER.	Miss MABEL HOWELL.
	Rev. D. J. THOMAS.

Joint Health and Education (Medical Services) Sub-Committee.

Representatives of Health Committee:

Alderman JOHN DONOVAN, C.B.E., J.P.
(Chairman).
 Alderman W. GREY, J.P.
 Councillor JAMES GRIFFITHS, J.P.
 „ A. J. BEECHER.
 „ D. T. WILLIAMS.

Representatives of Education Committee:

Alderman Sir W. R. WILLIAMS, J.P.
 Councillor H. HILES, J.P.
 „ O. C. PURNELL, J.P.
 „ R. G. ROBINSON.
 Miss M. COLLIN

Mental Deficiency Committee.

THE LORD MAYOR (Alderman A. E. GOUGH, J.P.).

Chairman:

Councillor T. J. MULLINS.

Deputy Chairman:

Councillor G. STEEL, J.P.

Councillor O. C. PURNELL, J.P.	Councillor C. G. MORELAND.
„ R. G. ROBINSON.	„ F. CHAPMAN.
„ T. J. KERRIGAN.	„ A. J. MARTIN.
„ ABRAHAM LEWIS.	Mrs. M. S. STEWART, J.P.
„ W. H. J. MUSTON.	Mrs. A. KERRIGAN.
„ MORGAN DAVIES, J.P.	Mrs. C. CANTILLON.
„ J. P. COLLINS.	Mrs. A. A. EVANS.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health and School Medical Officer :

RALPH M. F. PICKEN, B.Sc., M.B., Ch.B., D.P.H. (To 30th September, 1933).

J. GREENWOOD WILSON, M.D. (Lond.), M.R.C.P. (Lond.), D.P.H. (From 1st December, 1933).

Deputy Medical Officer of Health and Medical Superintendent of the Isolation Hospital:

CHRIS. J. MCSWEENEY, M.D., M.R.C.P.I., D.P.H.

Assistant Medical Officers:

HERBERT SHEASBY, M.B., Ch.B., D.P.H.	NANCY K. GIBBS, M.R.C.S. L.R.C.P., D.P.H.
HELENA J. WEBSTER, B.Sc., M.B., B.Ch., D.P.H.	HILDA A. COHEN, M.R.C.S., L.R.C.P., D.P.H.
	WM. P. PHILLIPS, M.R.C.S., L.R.C.P., D.P.H.
CECIL W. ANDERSON, M.B., Ch.B., D.P.H.	T. ISLWYN EVANS, M.A., M.B., Ch.B., D.P.H.

Dental Staff:

D. W. ELLIOT, L.D.S.

W. A. SUTHERLAND, L.D.S.

D. J. ANDREWS, L.D.S.

H. B. WILSON, L.D.S.

Four Clerk-Attendants.

Health Visiting, School and other Nursing Staff:

Supervisor: Mrs. L. HUNTLEY.

Eleven Health Visitors.

Two Tuberculosis Nurses.

One Venereal Diseases Nurse.

Eleven School Nurses.

One Orthopaedic Nurse.

Sanitary Staff (Urban):

Chief Inspector: W. G. PYATT.

One Chief Assistant Inspector.

Fourteen Assistant Inspectors.

Sanitary Staff (Port):

Chief Inspector: T. D. HILL.

Six Assistant Inspectors.

Veterinary Inspection and Meat Inspection (Abattoirs) Staff:

Veterinary Officer and Chief Inspector of Meat: L. B. A. GRACE, M.R.C.V.S., D.V.S.M.

Two Assistant Inspectors of Meat.

Public Analyst:

STANLEY DIXON, M.Sc., F.I.C.
One Laboratory Assistant.

Mental Deficiency Staff:

Visiting Officer: Miss K. POWELL.
Occupation and Training Centre:
Supervisor: Mrs. A. DASCOMBE.
One Instructress (whole-time) and 1 Instructor (part-time).

Clerical Staff:

Chief Clerk: THOMAS CHANT.
Nine male Clerks and 5 female Clerks (General Public Health Service, etc.).
Two male Clerks and 7 female Clerks (School Medical Service).

Other Staff:

One Epidemic Officer.
One Infant Protection Visitor.
Two Vaccination Officers (1 part-time).

Hospitals:

Llandough Hospital:

Medical Superintendent: DAVID G. MORGAN, M.R.C.S., L.R.C.P.
Deputy Medical Superintendent: D. A. WILLIAMS, B.Sc., M.R.C.S., L.R.C.P.
Senior Assistant Medical Officer: G. H. GARFIELD, B.Sc., M.B., B.Ch.
Matron: Miss C. L. JOHN (Also Superintendent Nurse, City Lodge P.A. Hospital).
Steward: H. T. ROFFEY (Also Master, City Lodge P.A. Institution).
Five Junior Resident Medical Officers.

Isolation Hospital:

Resident Medical Officer: JEAN W. SMELLIE, M.B., Ch.B., D.P.H.
Matron: Miss E. P. CHUBB.
One Junior Resident Medical Officer.

Lord Pontypridd Hospital:

Matron: Miss M. W. FOX.

PREFACE.

When, on 30th September, 1933, Dr. Ralph M. F. Picken resigned the position of Medical Officer of Health to the City and Port of Cardiff he had completed twelve years' service as Cardiff's third Medical Officer of Health, his predecessors being Dr. H. J. Paine (1854—1887) and Dr. Edward Walford (1888—1921).

During Dr. Picken's term of office many developments of the Cardiff Health Services took place. A perusal of the tabular statement that follows will indicate the extent and importance of these developments.

MATERNITY AND CHILD WELFARE SERVICE :—

Provision of home helps.

Provision of dental treatment for children under 5 and expectant mothers.

Arrangements for admission of confinement cases to the Maternity Hospital (Cardiff Royal Infirmary) by recommendation from the ante-natal clinics.

Establishment of a central consultative ante-natal clinic (by co-operation with the authorities of the Cardiff Royal Infirmary and the Welsh National School of Medicine).

Organisation of an orthopaedic scheme for the treatment of pre-school cripples.

Provision of a venereal diseases treatment centre for mothers and children as an integral part of the maternity and child welfare scheme.

Organisation of a scheme for specialist consultations in cases of puerperal fever and puerperal pyrexia and for their isolation and treatment at the Isolation Hospital.

Arrangements for the treatment at the Isolation Hospital of selected cases of measles in young children with the object of preventing measles-pneumonia.

Provision of artificial light treatment for children under 5 and expectant mothers.

Provision of X-ray apparatus for X-ray diagnosis.

Establishment of a vision clinic for children under 5.

Establishment of a throat and nose clinic for children under 5.

The child welfare centres have increased in number from 5 to 10 and the number of sessions held weekly from 9 to 15. In 1933, nearly one-third of Cardiff's child population (age 0—5) attended the child welfare centres.

The ante-natal clinics numbered 3 in 1933, as compared with 2 in 1921, and the weekly sessions of these clinics numbered 5 in 1933, as compared with 2 in 1921.

SCHOOL MEDICAL SERVICE :—

In 1921 the school clinic work was carried out in the basement of the City Hall, and a dental clinic was held at 10, Glossop Terrace. In 1933, the school clinic work was carried out at three clinics—Central, Gabalfa and Canton, and the dental work at four clinics—10, Glossop Terrace, Central, Gabalfa and Canton.

In connection with the school medical service the following new provisions have been made since 1921 :—

Artificial light apparatus for the diagnosis of ringworm of the scalp.

X-ray apparatus for the treatment of ringworm of the scalp and for X-ray diagnosis generally.

Orthopaedic scheme for the treatment of crippled school children.

Medical examination and treatment of secondary and high school pupils.

Greenhill Open-Air School.

Special classes for speech training.

Special classes for dull and backward children.

MENTAL DEFICIENCY SERVICE :—

The establishment of an Occupation and Training Centre.

GENERAL HEALTH SERVICE:—

Home nursing of pneumonia.

Organisation of rheumatism supervisory scheme and establishment of the Lord Pontypridd Hospital (Dulwich House).

Appropriation of Llandough Hospital.

Transfer of poor law functions and appointment of Medical Officer of Health as Medical Officer for Public Assistance.

Establishment of Caerau Smallpox Hospital.

Organisation of a diphtheria immunization scheme.

Increased sanitary provisions in the Cardiff Corporation Act, 1930, and in the Cardiff Corporation Bill, 1933.

"Si monumentum requiris, circumspice."

COMMENTARY ON THE ANNUAL REPORT FOR 1933.

The form and arrangement of the report are similar to those of former years except that the appendices have been eliminated. Some of the matter that appeared in those of previous reports is now placed in the appropriate sections and it is thought that this makes for easier reference. For the same reason a summary of general and vital statistics is set out on one page and printed in heavy type.

Expenditure.—The increase of £5,835 is accounted for mainly by loan charges on moneys borrowed for the construction of Llandough Hospital.

GENERAL HEALTH SERVICE.

Vital Statistics.—The birth-rate has again fallen (from 15·7 to 15·5 per 1,000). The death-rate has again risen (from 12·5 to 13·5 per 1,000), but in 1933 the increase may be attributed to deaths from influenza in the early part of the year. The excess of births over deaths was only 429 and the estimated mid-year population was 222,000, as compared with 222,600 the previous year and with 223,589 at the Census of 1931. Adamsdown retains its record for the highest birth-rate and Penylan that for the lowest.

Cancer.—There was a slight reduction in the death-rate from cancer (1·47 to 1·41 per 1,000), but the rate remains high as compared with the average rate for the preceding ten years (1·23). The deaths from abdominal cancer have again increased, as have those from cancer of the respiratory organs—an experience noted also in other parts of the country. Deaths from cancer of the uterus are the same as in 1932, but the total for cancer of the breast is reduced by one-quarter.

Deaths from Road Accidents.—The total number of deaths from violence (excluding suicide) is diminished, but the proportion of these due to road accidents is again increased. The percentage of violent deaths resulting from road accidents has more than doubled since the year 1923.

Maternal Mortality.—The death-rate for child-birth, though less than in 1932, remains higher than the average for England and Wales and for the 118 Great Towns.

Infant Mortality.—The death-rate of infants under one year is 77 per 1,000 live births, 13 more than the average for England and Wales and 10 more than the average for the 118 Great Towns. Of the infant deaths, 45·3 per cent. occurred in the first four weeks of life, and of these, two-thirds resulted from premature birth. All the factors making for the birth of premature, weakly and malformed babies are as yet imperfectly understood and the problem of neo-natal mortality (deaths in the first four weeks of life) is one of the most baffling of those confronting maternity and child welfare authorities at the present time.

Infectious Disease.—The epidemic of influenza has been referred to. It was of brief duration and had terminated by the end of March. Scarlet fever attained at the end of October its maximum incidence since the beginning of its increased prevalence in 1929. According to the law of epidemics, there should be many fewer cases for some years to come. In 1933 there were no fewer than 1,308 notifications, but fortunately the disease was mild in character and there were only four deaths.

The increased prevalence of diphtheria observed in former years was maintained in 1933, but not to anything like the same extent as scarlet fever. Although the "gravis" type of diphtheria germ associated in the North of England with extremely virulent disease has been isolated from the throats of patients at the Isolation Hospital, the case mortality in Cardiff was not excessive.

The importance of anti-toxin administration at the earliest possible moment in the treatment of diphtheria is demonstrated by the analysis in Dr. McSweeney's report (see page 19). Better still is to *prevent* diphtheria by active immunization—a concept that is slow to capture the imagination of the general public. Reports on this important work will be found on pages 14 and 21-22.

Measles continued in epidemic form and was responsible for 32 deaths. The policy of admitting selected cases to the Isolation Hospital was continued. Here the practice of "convalescent serum" inoculation for protection against measles was introduced for the first time in Cardiff. The innovation is described by Dr. McSweeney on page 22.

Hospitals.—The reports of Dr. McSweeney on the work of the Isolation and Lord Pontypridd Hospitals are presented on pages 16 and 22 respectively. Owing to the prevalence of epidemic disease in general, and scarlet fever in particular, it was necessary to keep Caerau Smallpox Hospital open for the reception of overflow cases. Despite this extra provision it was necessary to limit admissions of scarlet fever to patients whose home circumstances rendered efficient isolation and treatment difficult or impossible. That hospital treatment of modern scarlet fever should be limited in this way is now generally recognised to be the right policy—even in non-epidemic periods. The approved extensions at the Isolation Hospital were put in hand and work on these is still proceeding.

The excellent preventive work of the Lord Pontypridd Hospital for rheumatism was continued during the year.

Llandough Hospital (page 25) was opened by Alderman Donovan on 25th October, 1933. During the remainder of the year 616 patients were admitted and 149 operations performed.

Poor Law Medical Service.—The figures on page 28 show how greatly the work of the district medical officers has increased, particularly that of the two whole-time officers. Since these officers were appointed in 1926, the number of patients on their books has trebled. Although continued unemployment is an important cause of the increase, other influences are at work: (1) the population in some of the districts has increased as a result of the Corporation's building activities, (2) the hospitals are endeavouring to reduce the length both of in-patient and out-patient treatment by referring patients for continuation treatment to their own doctors, (3) the passing of the poor law "stigma" has diminished patients' reluctance to attend the "poor law" doctor.

At City Lodge Hospital, by agreements concluded during the year, patients admitted to the maternity wards and venereal disease wards are maintained by the Health Committee, and patients admitted to the tuberculosis wards are maintained by the Welsh National Memorial Association.

At Ely Lodge Institution 63 beds have now been approved by the Board of Control for the reception and treatment of juvenile mental defectives.

Hospital Accommodation.—The average number of institutional beds (for all purposes) available for Cardiff residents works out at 121 per 10,000, as compared with an estimated average of 94·7 per 10,000 for the whole of England and Wales.

Tuberculosis.—The rate of reduction of the death-rate for tuberculosis in Cardiff lags behind that for England and Wales. A note on this point appears on page 36. The problem of tuberculosis in Cardiff is bound up with that of overcrowding. Of the new cases visited during the year, only 43·7 per cent. had sleeping rooms to themselves and 45·2 per cent. had neither beds nor rooms to themselves.

Maternity and Child Welfare.—Approximately one-fifth of the births occurring in Cardiff took place either in Cardiff Royal Infirmary or in the City Lodge Hospital. The maternal mortality rate shows a welcome reduction from 5·42 per 1,000 live births in 1932 to 4·94 per 1,000 live births in 1933.

In Cardiff the attendance at ante-natal clinics is relatively low. The number of women attending during the year represents 39 per cent. of the total notified births, as compared with a corresponding figure of 42 per cent. for England and Wales. In 35 large towns and metropolitan boroughs the attendance represents over 50 per cent.

Of 1,317 women who attended the ante-natal clinics and who were confined during 1933, approximately half were confined in institutions (469 at the Cardiff Royal Infirmary Maternity Unit and 67 at City Lodge Hospital). Patients admitted to Cardiff Royal Infirmary Unit, with few exceptions, had been recommended from the ante-natal clinics.

Efficient dental treatment is one of the principal means of eradicating septic foci within the patient's own system that may predispose to puerperal sepsis later. Of the 1,418 expectant mothers seen at the ante-natal clinics, 290 attended for inspection at the dental clinics. Unfortunately, lack of adequate facilities makes it impossible to arrange for the routine inspection by dentists of all expectant mothers.

The quantity of milk (both wet and dried) supplied free to necessitous mothers and/or babies on medical certificates was less than in the previous year.

Housing.—By comparison with many other cities, Cardiff has no "slum problem", that is to say, it has relatively few houses that are old, worn out and unfit for human habitation. But one of the worst features of "slums" in all cities, namely, overcrowding, is continued from year to year in Cardiff by the evil practice of multiple tenancy, despite the fact that 9,215 houses have been built since the War by the City Council and by private enterprise. The difficulty is to provide houses not only sufficient in numbers but suitably situated. Prospective tenants are unwilling to move far away from the centre of the city for fear of incurring added expense in travelling to and from their work. Some of the ill effects of overcrowding have been discussed in the commentary on tuberculosis.

Another housing problem, but one that is being tackled energetically by the Corporation, is that of verminous houses (see page 58).

Bacteriological Examination of Milk.—An increased proportion of samples from both retailers' and producers' milk attained the Grade A standard.

Milk Adulteration.—Mr. Dixon (page 68) again comments on the results of the cryoscopic test for adulteration. His continued use of the test confirms his belief in its value. Only one sample of graded milk yielded any evidence of containing extraneous water.

PORT SANITARY SERVICE.

The Port Sanitary Regulations, 1933, came into force on 1st May. The arrangements made at the Port of Cardiff for the carrying out of the new regulations are described on pages 87-89. They have entailed extra work for the Department and have necessitated on the average two extra visits per week to the port by medical officers.

The difficulty mentioned in previous reports of arranging for the receipt of advance wireless messages has now been overcome in respect of those ships that are equipped with wireless. Unfortunately, some 30 per cent. of ships coming to the Port of Cardiff have no wireless installation. These, however, are able to signal to Lloyd's Signal Station at Barry Island, whence it has been arranged for warning messages to be passed on to the Port Sanitary Department.

Improvement has been observed in the sanitary conditions of newly constructed British vessels.

There was a marked increase in the quantity of imported frozen meat, fresh fruit, canned milk and tomatoes (both canned and fresh).

SCHOOL MEDICAL SERVICE.

The results of routine medical inspection of entrants for the past three years show a continued increase of dental defect—a strong indication of faulty diet in the “toddler” and “pre-school” years. It is surprising how many children have to be “educated” from their bread and jam to an appreciation of the wholesome meals provided by the Education Authority.

The number of free meals supplied during the year was increased. Attention is drawn to the account of the scheme which appears on pages 109 and 110, and includes a list of specimen menus.

MENTAL DEFICIENCY SERVICE.

At Ely Lodge Institution the Board of Control has approved additional accommodation for 63 mental defectives. This should ease to some extent the difficulty referred to in previous reports of finding institutional accommodation for mental defectives, but only in respect of the low-grade cases.

Mr. Chant has again undertaken the labour of putting together the report. He is also responsible for the changes referred to at the beginning of this commentary.

J. GREENWOOD WILSON,

*Medical Officer of Health and
School Medical Officer.*

PUBLIC HEALTH DEPARTMENT,

CITY HALL, CARDIFF,

September, 1934.

CITY OF CARDIFF.

PUBLIC HEALTH DEPARTMENT.

EXPENDITURE 1932-33.

Service	Total Expenditure	Income (Excluding Government Grants)	Net Cost of Service
	£	£	£
(1) HEALTH, ETC., SERVICES—			
Sanitary Expenses	13,372	920	12,452
Food and Drugs (Adulteration) Act ...	1,026	60	966
Diseases of Animals Acts	415	6	409
Midwives Acts	22	...	22
Shops Acts	535	6	529
Meteorological Station	68	...	68
	15,438	992	14,446
(2) PREVENTION AND TREATMENT OF TUBERCULOSIS	29,432	448	28,984
(3) MATERNITY AND CHILD WELFARE SERVICE	18,065	2,727	15,338
(4) VENEREAL DISEASES	5,240	...	5,240
(5) SCHOOL MEDICAL SERVICE	13,455	1,633	11,822
(6) MENTAL DEFICIENCY SERVICE	11,876	395	11,481
(7) PORT SANITARY SERVICE	5,022	1,368	3,654
(8) HOSPITALS:—			
City Isolation Hospital (Sanatorium) ...	19,308	1,852	17,456
Caerau Smallpox Hospital	2,158	660	1,498
Lord Pontypridd Hospital (Dulwich House)*	1,569	1,569	...*
Llandough Hospital (in course of con- struction)	18,463†	...	18,463†
Totals	140,026	11,644	128,382

Except in respect of the School Medical Service and Port Sanitary Service, Government contributions are included in the block grant to the City Council and are not based upon the expenditure on any of the services included in the above statement. It is estimated, however, that a sum of approximately £34,625 (representing direct Government grants and the estimated minimum amount of block grant attributable to services on which percentage grants were formerly paid) should be taken into consideration in any attempt to arrive at the net cost of the Health Services to the rates.

*Maintained by proceeds of the Lord Pontypridd bequest.

†Mainly loan charges.

GENERAL HEALTH SERVICE.

I.—SUMMARY OF GENERAL AND VITAL STATISTICS.

Area (land and inland water)	13,628 acres
Population (Census) 1931	223,589
Population (Estimated, mid-1933)	222,000
Number of persons per acre (exclusive of foreshore and Flat Holm) ...	18·5
Estimated number of inhabited houses	44,500
Estimated number of inhabited houses per acre (exclusive of foreshore and Flat Holm)	3·71
Estimated average number of persons per occupied house	4·8
Rateable value	£1,808,145
Estimated product of a penny rate	£6,865
Live births 3,442	Birth-rate per 1,000 ... 15·5
Deaths 3,013	Death-rate per 1,000 ... 13·5
Excess of births over deaths ...	Males 116; Females 313; Total 429
Deaths under 1 year ... 265	Rate per 1,000 births ... 77

Deaths of women in child-birth:—

	<i>Number.</i>	<i>Rate per 1,000 Live Births.</i>	<i>Rate per 1,000 Total Births.</i>
Puerperal sepsis... ..	5	1·45	1·38
Other puerperal causes	12	3·49	3·32
Totals	17	4·94	4·70

Deaths from various causes:—

	<i>Number.</i>	<i>Death-rate per 1,000.</i>
Typhoid fever	1	0·00
Measles	32	0·14
Scarlet fever	4	0·02
Whooping cough	14	0·06
Diphtheria	19	0·08
Tuberculosis of respiratory system	234	1·05
Other tuberculous diseases	47	0·21
Cancer	313	1·41

II.—AREA AND POPULATION.

Area.—The total area of Cardiff (including inland water, foreshore and Flat Holm) is 13,628 acres; excluding inland water, the foreshore and Flat Holm it is 11,580 acres. The area of each municipal ward is as follows:—

<i>Municipal Ward.</i>						<i>Acres (Land and Inland Water).</i>
Central ...	...	...	...	...	...	535
South ...	...	...	...	...	...	1,073
Cathays ...	...	...	...	...	...	338
Adamsdown ...	...	...	...	...	...	1,320
Riverside ...	...	...	...	...	...	320
Canton ...	...	...	...	...	...	247
Grangetown ...	...	...	...	...	...	949
Roath ...	...	...	...	...	...	754
Plasnewydd ...	...	...	...	...	...	233
Splott ...	...	...	...	...	...	1,912
Penylan ...	...	...	...	...	...	1,765
Llandaff ...	...	...	...	...	...	2,719
Gabalfa ...	...	...	...	...	...	1,463

Population.—According to the Census of 1931, the population of Cardiff was 223,589 (males 107,309, females 116,280), and the Registrar-General's estimate for mid-1933 was 222,000. The populations of the several municipal wards, according to the Census of 1931, were as follows.

<i>Municipal Ward.</i>						<i>Population.</i>
Central ...	...	...	...	...	...	13,544
South ...	...	...	...	...	...	13,635
Cathays ...	...	...	...	...	...	16,566
Adamsdown ...	...	...	...	...	...	17,209
Riverside ...	...	...	...	...	...	17,602
Canton ...	...	...	...	...	...	17,273
Grangetown ...	...	...	...	...	...	15,403
Roath ...	...	...	...	...	...	15,792
Plasnewydd ...	...	...	...	...	...	15,056
Splott ...	...	...	...	...	...	20,898
Penylan ...	...	...	...	...	...	14,146
Llandaff ...	...	...	...	...	...	27,762
Gabalfa ...	...	...	...	...	...	18,703

III.—BIRTHS.

The numbers of births and still-births registered during 1933 and allocated to Cardiff, sub-divided according to sex and legitimacy, are shown in the following tables:—

Births.

	Legitimate	Illegitimate	Totals
Males	1,668	77	1,745
Females	1,612	85	1,697
Totals	3,280	162	3,442

Still-births.

	Legitimate	Illegitimate	Totals
Males	88	6	94
Females	73	9	82
Totals	161	15	176

The numbers of live births and still-births belonging to, but registered outside, Cardiff were 45 (23 males and 22 females) and 8 (4 males and 4 females) respectively, whilst 320 births (169 males and 151 females) and 53 still-births (25 males and 28 females) belonging to other districts were registered in Cardiff. Allowing for these corrections, the net figures are as shown above.

The 3,442 registered births were equivalent to a birth-rate of 15·5 per 1,000 of the population, the rate for legitimate births and illegitimate births being 14·8 and 0·7 per 1,000 respectively. In 1923 the birth-rate was 22·3 per 1,000 and since then it has fallen gradually as follows:—

<i>Year.</i>	<i>Birth-rate per 1,000.</i>
1923	22·3
1924	21·6
1925	20·6
1926	20·1
1927	18·1
1928	18·0
1929	17·5
1930	16·9
1931	16·8
1932	15·7
1933	15·5

The 176 registered still-births constituted a rate of 49 per 1,000 total (live and still) births, as compared with 56 in 1932.

The following is a comparison of the birth-rate for 1933 and the preceding ten years with the rates in England and Wales and the 118 Great Towns for 1933:—

			<i>Birth-rate per 1,000.</i>
CARDIFF	{ 1933	...	15.5
	{ 1923-1932	...	18.7
England and Wales, 1933		...	14.4
118 Great Towns, 1933...		...	14.4

The birth-rate for 1933 in each municipal ward was as follows:—

<i>Municipal Ward.</i>			<i>Birth-rate per 1,000.</i>
Central	...	...	14.5
South	...	...	17.6
Cathays	...	...	13.0
Adamsdown	...	...	19.7
Riverside	...	...	13.0
Canton	...	...	15.4
Grangetown	...	...	17.0
Roath	...	...	13.7
Plasnewydd	...	...	12.7
Splott	...	...	18.3
Penylan	...	...	12.4
Llandaff	...	...	16.5
Gabalfa	...	...	14.1

A notable feature of the birth-rates in the municipal wards is the consistency with which for several years the highest rate has occurred in Adamsdown and the lowest in Penylan.

IV.—DEATHS.

Deaths from All Causes.—The total number of deaths from all causes and at all ages registered during the year and allocated to Cardiff, after allowing for the necessary corrections, was 3,013 (1,629 males and 1,384 females). The death-rate per 1,000 of the population was 13.5. The total number of deaths registered in Cardiff was 3,414, but 555 of these were of non-residents, which occurred mainly in hospitals and nursing homes, and 154 deaths of residents of Cardiff occurred and were registered in other areas. Allowance has been made for these outward and inward transferable deaths in arriving at the net number. Of the 3,013 deaths, 1,129 or 37.5 per cent. occurred in public institutions, as compared with 38.6 per cent. in 1932 and 36.7 per cent. in 1931. The death-rate for each of the last ten years was as follows:—

<i>Year.</i>			<i>Death-rate per 1,000.</i>
1924	...	...	12.1
1925	...	...	12.8
1926	...	...	10.8
1927	...	...	12.6
1928	...	...	11.7
1929	...	...	12.9
1930	...	...	11.4
1931	...	...	12.8
1932	...	...	12.5
1933	...	...	13.5

It will be seen that the death-rate for 1933 was the highest recorded during the ten years and is accounted for entirely by the relatively large number of deaths which occurred during a severe epidemic of influenza in the early part of the year.

The death-rate for 1933 is compared with the rate for the preceding ten years and with the rates in England and Wales and the 118 Great Towns for 1933 in the following statement:—

			<i>Death-rate per 1,000.</i>
CARDIFF	{ 1933	...	13.5
	{ 1923-32	...	12.2
England and Wales, 1933			12.3
118 Great Towns, 1933 ...			12.2

The death-rate for 1933 in each municipal ward was as follows:—

<i>Municipal Ward.</i>			<i>Death-rate per 1,000.</i>
Central	...	...	16.5
South	...	...	15.0
Cathays	...	...	13.5
Adamsdown	...	...	19.9
Riverside	...	...	15.9
Canton	...	...	13.2
Grangetown	...	...	13.4
Roath	...	...	13.2
Plasnewydd	...	...	13.3
Splott	...	...	13.4
Penylan	...	...	12.8
Llandaff	...	...	8.9
Gabalfa	...	...	10.5

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1933:—

CAUSES OF DEATH	ALL AGES			AGE PERIODS								
	M.	F.	Totals	Under 1 yr.	1-2 yrs.	2-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	65-75 yrs.	75 yrs and upwards
Typhoid and Paratyphoid												
Fevers	1	...	1	...	...	...	...	...	...	1	...	...
Measles	19	13	32	9	10	11	1	...	...	1	...	...
Scarlet Fever	2	2	4	...	...	2	2	...	...	...	...	...
Whooping Cough	5	9	14	2	5	5	2	...	...	...	...	...
Diphtheria	12	7	19	...	...	9	9	...	...	1	...	...
Influenza	70	71	141	1	2	7	1	6	28	39	33	24
Encephalitis Lethargica	1	1	2	...	...	...	...	...	...	1	1	...
Cerebro-Spinal Fever	2	3	5	2	2	...	1	...	...	...	...	...
Tuberculosis of Respiratory System	141	93	234	1	1	1	8	57	104	60	2	...
Other Tuberculous Diseases	22	25	47	2	7	9	9	11	8	1	...	...
Syphilis	2	3	5	...	...	...	...	...	...	4	1	...
General Paralysis of the Insane, Tabes Dorsalis	11	2	13	...	...	...	...	...	4	6	2	1
Cancer, Malignant Disease	156	157	313	...	...	...	2	2	27	143	96	43
Diabetes	12	21	33	...	...	...	2	1	...	9	15	6
Cerebral Haemorrhage, etc.	34	55	89	...	...	...	...	...	2	22	35	30
Heart Disease	387	305	692	...	...	...	5	9	44	192	234	208
Aneurysm	12	2	14	...	...	...	...	...	2	6	5	1
Other Circulatory Diseases	111	63	174	...	...	...	...	...	2	40	65	67
Bronchitis	66	62	128	13	1	3	3	3	6	23	24	52
Pneumonia (All Forms)	124	76	200	58	24	11	6	5	24	36	19	17
Other Respiratory Diseases	17	9	26	...	2	2	...	...	5	11	2	4
Peptic Ulcer	15	3	18	...	...	...	...	...	2	9	7	...
Diarrhoea, etc.	20	20	40	28	2	2	1	...	3	2	...	2
Appendicitis	8	9	17	...	...	1	5	2	4	3	2	...
Cirrhosis of Liver	2	2	4	...	...	...	...	...	1	...	...	3
Other Diseases of Liver, etc.	4	9	13	...	...	...	...	...	1	8	2	2
Other Digestive Diseases	31	26	57	6	2	3	1	1	7	20	9	8
Acute and Chronic Nephritis	49	47	96	...	...	1	4	2	14	30	34	11
Puerperal Sepsis ... ..	...	5	5	...	...	...	...	...	5	...	...	...
Other Puerperal Causes ... ..	...	12	12	...	...	...	...	2	10	...	...	...
Congenital Debility, Pre- mature Birth, Malform- ations, etc.	58	72	130	128	1	...	...	...	...	1	...	...
Senility	24	62	86	...	...	...	...	...	...	2	21	63
Suicide	17	10	27	...	...	...	...	...	7	16	4	...
Other Violence	58	30	88	4	5	6	3	13	14	22	7	14
Other Defined Diseases	136	98	234	11	4	8	17	13	38	60	54	29
Causes ill-defined or un- known ... ..	...	...	...	...	...	...	...	...	...	...	...	...
All Causes	1,629	1,384	3,013	265	68	81	82	127	362	769	674	585

Cancer.—It is satisfactory to be able to record that there was a slight reduction in the death-rate from cancer or malignant disease compared with the death-rate for the previous year. The death-rates for 1933, compared with the rates for previous years, were as follows:—

	Death-rate per 1,000		
	Males	Females	Both Sexes
1933	1.46	1.36	1.41
1932	1.48	1.46	1.47
1923-1932	1.16	1.28	1.23

The deaths from cancer during 1933 are analysed according to age, sex and localisation of the disease in the following table:—

Cancer— Malignant Disease	5-15 years		15-25 years		25-45 years		45-65 years		65-75 years		75 years and upwards		All Ages		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Both Sexes
Buccal Cavity and Pharynx...	1	...	...	1	1	6	3	4	...	11	5	16
Digestive Organs and Peritoneum	6	4	47	33	39	25	19	13	111	75	186
Respiratory Organs	1	...	2	...	13	6	...	2	...	...	15	9	24
Uterus	9	...	12	...	1	...	2	...	24	24
Other Female Genital Organs	7	...	5	...	1	...	13	13
Breast	4	...	14	...	5	...	2	...	25	25
Male Genito-urinary Organs	1	...	5	...	6	...	1	...	13	...	13
Skin	1	1	...	...	...	...	1	1	2
Other or Unspecified Organs	...	1	1	...	...	1	2	...	1	3	1	...	5	5	10
Totals	...	2	1	1	9	18	69	74	52	44	25	18	156	157	313

Deaths from Road Accidents.—The number of deaths from violence (excluding suicide) and the number and proportion of these due to road accidents in each year since 1923 are shown in the following table:—

Year	Total Deaths from Violence (excluding Suicide)	Deaths from Road Accidents	
		Number	Percentage
1923	100	14	14.0
1924	97	21	21.6
1925	91	23	25.3
1926	107	17	15.9
1927	103	20	19.4
1928	103	26	25.2
1929	98	16	16.3
1930	98	29	29.6
1931	93	30	32.3
1932	110	31	28.2
1933	88	26	29.5

The deaths from road accidents in 1933 have been analysed in such a way as to show the type of vehicle and the class of person involved. The results are presented in the following table:—

Vehicles	Fatal Accidents	Persons Killed				Totals
		Motor Cyclists	Passen- gers	Pedal Cyclists	Pedes- trians	
Heavy motor vehicles ...	3	...	...	...	3	3
Light motor cars ...	8	...	...	...	8	8
Motor cycles ...	2	1	...	...	1	2
Horse-drawn van ...	1	...	...	...	1	1
Heavy motor vehicles and motor cycles ...	3	2	1*	...	...	3
Heavy motor vehicles and pedal cycles ...	2	...	...	2	...	2
Light motor cars and motor cycles ...	2	2	...	...	...	2
Light motor cars and pedal cycles ...	2	...	...	2	...	2
Pedal cycles ...	3	...	...	1	2	3
Totals ...	26	5	1	5	15	26

* Pillion rider.

Maternal Mortality.—In spite of the efforts made to reduce the number of deaths of women in child-birth, the death-rate still remains relatively high. During 1933 the rate per 1,000 live births was 4·94 and the rate per 1,000 live and still-births was 4·70. The death-rate has varied during the ten years 1924-1933 as follows:—

Year	Death-rate per 1,000 Live Births		
	Puerperal Sepsis	Other Puerperal Causes	Total
1924 ...	1·84	3·48	5·32
1925 ...	1·71	2·78	4·49
1926 ...	1·32	3·97	5·29
1927 ...	1·71	2·20	3·91
1928 ...	2·44	3·42	5·86
1929 ...	0·76	2·80	3·56
1930 ...	2·64	2·64	5·28
1931 ...	1·85	1·59	3·44
1932 ...	1·14	4·28	5·42
1933 ...	1·45	3·49	4·94

The following table compares the death-rate of women in child-birth for 1933 with the rate for the preceding ten years and with the rates for 1933 in England and Wales and in the 118 Great Towns respectively:—

	Deaths of Women in Child-birth per 1,000 Live Births		
	Puerperal Sepsis	Other Puerperal Causes	Total
CARDIFF { 1933 ...	1.45	3.49	4.94
1923-1932 ...	1.77	2.93	4.70
England and Wales, 1933	1.79	2.63	4.42
118 Great Towns, 1933	1.86	2.40	4.26

Infant Mortality.—The number of deaths under one year of age was 265. Of these, 253 were deaths of legitimate infants and 12 were of illegitimate infants. The infant mortality rate was 77 per 1,000 live births (legitimate 77 and illegitimate 74). The rate for each of the past ten years was as follows:—

<i>Year.</i>	<i>Deaths under 1 year per 1,000 Births.</i>		
1924	79
1925	93
1926	60
1927	80
1928	77
1929	84
1930	72
1931	77
1932	76
1933	77

The infant mortality rate for 1933, compared with the rate for the preceding ten years and with the rates in England and Wales and the 118 Great Towns for 1933, was as follows:—

	<i>Deaths under 1 year per 1,000 Births.</i>		
CARDIFF { 1933	77
1923-1932	77
England and Wales, 1933	64
118 Great Towns, 1933	67

The rate for 1933 in each municipal ward is shown below:—

<i>Municipal Ward.</i>	<i>Deaths under 1 year per 1,000 Births.</i>		
Central	86
South	133
Cathays	88
Adamsdown	107
Riverside...	69
Canton	90
Grangetown	84
Roath	55
Plasnewydd	52
Splott	89
Penylan	51
Llandaff	59
Gabalfa	45

The deaths from various causes under one year of age in several age periods during 1933, compiled from figures supplied by the Registrar-General, are shown in the following table:—

Causes of Death	Under 1 Week	1—2 weeks	2—3 weeks	3—4 weeks	Total under 4 weeks	4 weeks —3 months	3—6 months	6—9 months	9—12 months	Totals
Measles ...	...	...	...	...	...	1	...	2	6	9
Whooping Cough ...	...	...	...	...	...	...	1	1	...	2
Diphtheria ...	...	...	...	...	...	...	...	...	...	...
Influenza ...	...	...	...	1	1	...	...	...	...	1
Tuberculosis of Nervous System ...	...	...	...	...	...	...	...	1	...	1
Tuberculosis of Intestines and Peritoneum ...	...	...	...	...	...	...	...	1	...	1
Other Tuberculosis ...	...	...	...	...	...	...	1	...	...	1
Syphilis ...	...	...	...	...	...	...	...	...	...	...
Meningitis ...	...	...	...	...	...	...	...	...	...	...
Convulsions ...	1	1	...	...	2	2	3	1	...	8
Bronchitis ...	...	...	1	...	1	8	1	3	...	13
Pneumonia ...	1	1	...	1	3	13	15	12	15	58
Other Respiratory Diseases ...	...	...	...	...	...	...	...	...	...	...
Inflammation of Stomach ...	...	...	...	1	1	...	1	1	...	3
Diarrhoea and Enteritis ...	...	...	...	1	1	7	12	6	2	28
Hernia, Intestinal Obstruction ...	...	...	...	...	...	...	...	2	...	2
Congenital Malformation ...	12	5	1	1	19	4	1	1	1	26
Congenital Debility ...	...	...	...	...	...	2	...	2	...	4
Premature Birth ...	62	10	5	2	79	8	1	...	...	88
Injury at Birth ...	7	1	...	...	8	...	...	...	...	8
Atelectasis ...	...	...	...	...	...	...	...	...	...	...
Icterus ...	...	1	...	...	1	...	...	...	...	1
Diseases of Umbilicus ...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Early Infancy ...	1	...	...	...	1	...	...	...	...	1
Suffocation in Bed ...	...	...	...	...	...	...	...	...	...	...
Inattention at Birth ...	...	...	...	...	...	...	...	...	...	...
Other forms of Violence ...	2	...	1	...	3	1	...	...	...	4
Other Causes ...	...	...	...	...	...	2	1	2	1	6
All Causes ...	86	19	8	7	120	48	37	35	25	265
Percentage of Total Deaths under 1 year ...	32.5	7.2	3.0	2.6	45.3	18.1	13.9	13.2	9.4	...

It will be seen that the proportion of infant deaths under four weeks of age was 45·3 per cent. This proportion of the total number of deaths under one year has varied during the ten years 1924-1933 as follows:—

<i>Year.</i>				<i>Deaths under 4 Weeks per cent. of total Deaths under 1 Year.</i>	
1924	...	...	...	36·4	
1925	...	...	...	39·0	
1926	...	...	...	44·7	
1927	...	...	...	47·7	
1928	...	...	...	41·1	
1929	...	...	...	43·9	
1930	...	...	...	50·4	
1931	...	...	...	45·2	
1932	...	...	...	50·9	
1933	...	...	...	45·3	

V.—NOTIFIABLE DISEASES

(OTHER THAN TUBERCULOSIS).

The incidence of notifiable diseases (other than tuberculosis) is shown in the following table, which also shows the number of cases admitted to hospital and the number of deaths:—

Disease according to Notification				Cases Notified	Cases admitted to Hospital	Deaths
Smallpox	...	...	...	...	...	...
Scarlet Fever	...	...	...	1,308	695	4
Diphtheria	...	...	...	476	474	19
Enteric Fever	...	...	...	4	2	1
Pneumonia*	...	...	...	294	8	200
Puerperal Fever	...	...	...	39	6	5
Puerperal Pyrexia	...	...	...	54	1	...
Cerebro-Spinal Fever	...	...	...	10	2	5
Acute Poliomyelitis	...	...	...	2	1	...
Acute Polioencephalitis	...	...	...	2	...	2
Encephalitis Lethargica	...	...	...	3	...	2
Dysentery	...	...	...	13	12	2
Ophthalmia Neonatorum	...	...	...	36	...	...
Erysipelas	...	...	...	64	14	3
Malaria	...	...	...	2	...	...
Food Poisoning	...	...	...	50	...	2

*Only such cases of pneumonia as fall into the categories "acute primary" and "influenzal" are notifiable. Deaths from all forms of pneumonia are included in the last column.

The notified cases of disease are analysed in various age groups in the following table:—

	Years												Totals
	—1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Scarlet Fever...	8	33	72	90	129	583	279	44	53	14	3	—	1,308
Diphtheria ...	—	5	18	19	41	211	98	28	44	8	4	—	476
Enteric Fever ...	—	—	—	—	—	—	1	—	—	1	2	—	4
Pneumonia ...	11	17	10	10	15	33	14	23	59	41	39	22	294
Puerperal Fever ...	—	—	—	—	—	—	—	3	29	6	1	—	39
Puerperal Pyrexia ...	—	—	—	—	—	—	—	3	46	5	—	—	54
Cerebro-spinal Fever ...	3	2	—	—	—	1	1	1	—	2	—	—	10
Acute Poliomyelitis ...	—	—	1	—	—	1	—	—	—	—	—	—	2
Acute Polioencephalitis ...	—	—	1	—	—	1	—	—	—	—	—	—	2
Encephalitis Lethargica ...	—	—	—	—	—	—	—	1	—	—	2	—	3
Dysentery ...	—	2	1	2	3	3	—	—	1	—	—	1	13
Ophthalmia Neonatorum ...	36	—	—	—	—	—	—	—	—	—	—	—	36
Erysipelas ...	3	—	1	—	—	1	2	1	9	13	24	10	64
Malaria ...	—	—	—	—	—	—	—	—	1	1	—	—	2
Food Poisoning ...	—	—	—	2	1	5	5	5	15	6	10	1	50

The incidence of scarlet fever and diphtheria in the municipal wards and in institutions was as follows:—

Municipal Ward, etc.				Cases Notified	
				Scarlet Fever	Diphtheria
Central ...	...	...	...	71	28
South ...	...	...	...	45	26
Cathays ...	...	...	...	69	27
Adamsdown ...	...	...	...	98	30
Riverside ...	...	...	...	109	19
Canton ...	...	...	...	100	24
Grangetown ...	...	...	...	88	36
Roath ...	...	...	...	70	31
Plasnewydd ...	...	...	...	87	31
Splott ...	...	...	...	157	44
Penylan ...	...	...	...	37	12
Llandaff ...	...	...	...	241	127
Gabalfa ...	...	...	...	109	15
Institutions ...	...	...	...	27	26
Totals	...	...	...	1,308	476

Smallpox.—No cases of smallpox were notified during 1933.

Vaccination.—The results of the work of the vaccination officers during the year in connection with 3,722 children are given in the following statement:—

Successfully vaccinated	...	1,501
Insusceptible	...	10
Postponed	...	19
Certificates of exemption	...	1,791
Died unvaccinated	...	282
Unaccounted for (including cases removed to other districts)	...	119
Total	...	3,722

It will be observed from the following table that the proportion of children not returned as vaccinated and the proportion of certificates of exemption from vaccination are increasing:—

Year	Successfully Vaccinated	Certificates of Exemption	Percentage not returned as Vaccinated	Percentage of Certificates of Exemption
1922	2,671	1,900	47·7	37·2
1923	4,223	1,538	35·5	23·5
1924	2,801	1,533	44·2	30·5
1925	2,541	1,533	48·1	31·3
1926	2,132	1,585	54·2	34·0
1927	2,027	1,255	52·2	29·5
1928	2,215	1,413	47·8	33·2
1929	1,797	1,520	56·7	36·6
1930	2,009	1,487	50·1	36·9
1931	1,905	1,507	52·5	37·6
1932	1,758	1,639	54·0	42·9
1933	1,501	1,791	59·1	48·1

Scarlet Fever.—Notwithstanding that 1,308 cases of scarlet fever were notified during 1933, there were but 4 deaths from the disease, indicating that the type of scarlet fever prevailing was of a very mild type, as it has been for several years. Scarlet fever has been very prevalent in Cardiff since 1929, as will be seen from the following figures:—

Year.	Cases.	Deaths.
1927	227	—
1928	263	2
1929	640	2
1930	537	—
1931	632	5
1932	726	3
1933	1,308	4

The disease was exceptionally prevalent during the autumn of 1933, no less than 68 cases being notified during the week ended 28th October. Relatively high incidence of scarlet fever has not hitherto lasted for more than four or five years, and it would therefore appear that the number of cases for the next few years, at least, will be considerably less.

Diphtheria.—To some extent the incidence of diphtheria has followed that of scarlet fever, although the number of cases notified in 1933 (476) was slightly less than the number in the previous year (493). The course of the incidence of the disease since 1927 will be seen from the following statement, which also shows the number of deaths that has occurred each year:—

Year.	Cases.	Deaths.
1927	344	15
1928	487	16
1929	735	30
1930	731	29
1931	589	24
1932	493	10
1933	476	19

Active Immunization.—Towards the end of 1933 an effort was made to extend the work of active immunization against diphtheria amongst children. The results are shown in the following tabular statement, which gives a record of the year's work in this connection:—

Children	Subjected to Anterior Schick Test	Positive	Positive cases immunized	Immunized but not subjected to Anterior Schick Test	Total number immunized*	Failed to attend for completion
Under 5 years ...	107	77	76	284	360	25
5 years and upwards ...	383	151	149	233	382	66
Totals ...	490	228	225	517	742	91

*"Immunized" here means "attended for complete course of injections of diphtheria protective material but not subjected to posterior Schick test."

Enteric Fever.—Only 4 cases of enteric fever were notified and 1 death was registered as being due to the disease during the year, as compared with 8 cases and 2 deaths in 1932.

Ophthalmia Neonatorum.—The number of cases of ophthalmia neonatorum notified during the year was 36, 11 of which occurred in institutions. Of the remaining 25 cases, 13 were treated by private medical practitioners, 8 by nurses of the Queen's Institute of District Nursing and 1 at the out-patient department of the Cardiff Royal Infirmary; the other three cases were admitted to Llandough Hospital, the City Lodge Hospital and the Cardiff Royal Infirmary respectively. No deaths were recorded as having been due to the disease, and in one case only was the vision impaired, a complete cure being effected in all the other cases.

Food Poisoning.—Cases of food poisoning are notifiable under the provisions of Section 106 of the Cardiff Corporation Act, 1930. During 1933, 50 cases were formally notified and the causes of two deaths amongst these cases were consistent with food poisoning. Nine of the cases occurred in three small groups of two, three and four persons respectively; the sources of the poisoning in these cases were not traced. The other 41 cases also occurred in three groups, the numbers of persons who were notified as affected being 11, 21 and 9 respectively. The incriminated foods were faggots in one instance and cream pastries in two instances, from which food poisoning organisms having the cultural and serological characters of the *Salmonella* group were isolated.

VI.—NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles.—The epidemic of measles which commenced in July, 1932, continued until June, 1933. There were 32 deaths from the disease during the year, the death-rate per 1,000 of the population being 0.14, as against 10 deaths and a death rate of 0.04 per

1,000 in 1932. The number of deaths and the death-rate from measles in each of the ten years 1924-1933 were as follows:—

<i>Year.</i>		<i>Deaths.</i>		<i>Death-rate per 1,000.</i>
1924	...	35	...	0·15
1925	...	88	...	0·39
1926	...	10	...	0·04
1927	...	31	...	0·14
1928	...	21	...	0·09
1929	...	113	...	0·50
1930	...	8	...	0·03
1931	...	50	...	0·22
1932	...	10	...	0·04
1933	...	32	...	0·14

Whooping Cough.—Fourteen deaths were recorded during 1933 as being due to whooping cough, corresponding to a death-rate of 0·06 per 1,000. The following is a comparison of the number of deaths and the death-rate from this disease during the ten years 1924-1933:—

<i>Year.</i>		<i>Deaths.</i>		<i>Death-rate per 1,000.</i>
1924	...	44	...	0·19
1925	...	34	...	0·15
1926	...	19	...	0·08
1927	...	7	...	0·03
1928	...	28	...	0·12
1929	...	24	...	0·11
1930	...	22	...	0·10
1931	...	6	...	0·03
1932	...	24	...	0·11
1933	...	14	...	0·06

Diarrhoea.—The number of deaths at all ages from diarrhoea, etc., during the year was 40, being equivalent to a death-rate of 0·18 per 1,000 of the population. Of these 40 deaths, 30 occurred amongst children under 2 years of age, corresponding to a death-rate of 8·7 per 1,000 births. During each of the ten years 1924-1933 the number of deaths from diarrhoea, etc., under 2 years and the death-rate per 1,000 births were as follows:—

<i>Year.</i>		<i>Deaths under 2 years.</i>		<i>Death-rate per 1,000 births.</i>
1924	...	53	...	10·8
1925	...	70	...	15·0
1926	...	40	...	8·8
1927	...	34	...	8·3
1928	...	46	...	11·2
1929	...	44	...	11·2
1930	...	30	...	7·9
1931	...	29	...	7·7
1932	...	30	...	8·6
1933	...	30	...	8·7

Influenza.—A very severe epidemic of influenza occurred during January and February, 1933. The total number of deaths registered during the year as being due to the disease was 141, of which 122 occurred during the first quarter. The death-rate per 1,000 for the year was 0·63, as compared with 0·25 in 1932. The mortality from respiratory diseases is, of course, influenced greatly by the prevalence of influenza. The following tabular statement is therefore given to show the number of deaths recorded as being caused by influenza and respiratory diseases and the proportion of deaths from these causes to the total number of deaths from all causes during each of the ten years 1924-1933:—

Year	Number of Deaths from			Proportion per cent. of Deaths from All Causes
	Influenza	Respiratory Diseases	Influenza and Respiratory Diseases	
1924	96	501	597	21·8
1925	59	475	534	18·3
1926	33	324	357	14·6
1927	107	532	639	22·4
1928	42	389	431	16·2
1929	89	425	514	17·6
1930	23	292	315	12·4
1931	60	379	439	15·3
1932	57	287	344	12·3
1933	141	354	495	16·4

Home Nursing of Pneumonia.—The arrangement whereby nurses of the Queen's Institute of District Nursing undertake the home nursing of cases of pneumonia for the Department continued during 1933. The following is a summary of the number of cases dealt with and the number of visits made by them during the year:—

Cases in hand at beginning of year	...	4
Cases referred for nursing during the year...	132	
Visits made during the year	...	2,663
Cases in hand at end of year	...	4

VII.—CARDIFF ISOLATION HOSPITAL.

The number of patients admitted to hospital, the average daily number of patients under treatment, the number of patient-days and the average duration of residence of the patients admitted are shown in the following table:—

Disease according to Diagnosis after Admission	Patients Admitted	Average Daily Number of Patients	Patient- days	Average Duration of Residence in days
Scarlet Fever	663	75	28,269	43
Diphtheria	377	73	24,203	64
Other Diseases	362	17	8,909	25
All Diseases	1,402	165	61,381	44

Report for 1933 of Chris. J. McSweeney, M.D., M.R.C.P.I., D.P.H.,

Resident Medical Superintendent of the Cardiff Isolation Hospital.

During the year there were admitted to the wards 1,402 patients. All the pavilions, including the old smallpox block, were in full use during the whole of the year. Caerau Hospital was also in full use for the whole of the year.

The health of the nursing and domestic staff was in the main satisfactory. One nurse contracted diphtheria and one scarlet fever during the year. As in previous years, no nurse showing a negative reaction to the Schick or Dick test developed diphtheria or scarlet fever respectively. Seventeen nurses contracted other conditions, mainly mild attacks of tonsillitis. Two maids contracted diphtheria, 1 scarlet fever and 19 suffered from various mild illnesses. Thirty members of the staff were Schick tested and 8 immunized* against diphtheria, 28 were Dick tested and 5 immunized* against scarlet fever.

The usual lectures and tutorials were given during the year. Ten nurses passed the Preliminary State Examination and four failed, while five passed the Final Examination and one failed.

Scarlet Fever.—Six hundred and ninety-eight cases were admitted to the wards, of whom 663 were true cases of scarlet fever. The remaining 35 patients suffered from a variety of adventitious rashes and made satisfactory recoveries. Twelve of the true cases of scarlet fever suffered concurrently from other diseases, mainly measles and diphtheria.

The type of scarlet fever prevailing was mild in the main and the cases were definitely less acute than in 1932. Of the 663 cases of scarlet fever, 633 were finally classified as simple, 25 as septic or sub-septic and 5 as toxic or sub-toxic. Two hundred and seventy-seven cases received doses of scarlatinal antitoxin (10 c.c. or more).

The principal complications met with were as follows:—

<i>Complication.</i>	<i>Cases.</i>	<i>Percentage.</i>
Arthritis	3	0·45
Adenitis	168	25·33
Otorrhoea	56	8·44
Rhinitis (septic and diphtheritic)	71	10·70
Nephritis	4	0·60
Conjunctivitis	1	0·15
Tonsillitis	4	0·60
Quinsy	1	0·15
Laryngitis	1	0·15
Albuminuria	43	6·48
Epistaxis	3	0·45
Jaundice	2	0·30
Cellulitis	1	0·15
Diphtheria	4	0·60

Four of the scarlet fever patients died, but in 1, a child aged 16 months, admitted from Glan Ely Hospital with a mild attack of scarlet fever and tuberculous dactylitis, death was due to tuberculous meningitis, which developed within a week of admission. Two of the remaining deaths were due to septic forms of the disease, 1 case a Mongolian imbecile, aged 11 years, dying 15 days after admission, and the other, a child of 5 years, dying 36 hours after admission from multiple abscesses. The remaining fatal case

* Completed full course of prophylactic injections and subsequently reacted negatively to skin (Schick or Dick) tests.

occurred in a child of 2 years, who suffered from concurrent broncho-pneumonia and scarlet fever. Classifying all 4 deaths to scarlet fever, the hospital mortality was 0.6 per cent.

Diphtheria.—Four hundred and ninety-three cases were admitted to the wards, of whom 377 were true cases of diphtheria, 12 were diphtheria carriers, while the remaining 104 suffered from a variety of non-diphtheritic conditions. Of the latter group, the majority suffered merely from a variety of septic and other throat conditions, 72 of these being either tonsillitis or quinsy. One was in reality suffering from measles and there was one case of each of the following conditions:—Vincent's angina, laryngismus stridulus, catarrhal laryngitis, ulcerated throat, bronchitis, stomatitis and malnutrition. The remaining 24 cases notified as diphtheria were in reality suffering from scarlet fever. No deaths occurred in this group of 104 cases.

There were 14 deaths among the 377 true cases of diphtheria, but one of these, which occurred 3 hours after admission to hospital in a woman 50 years of age with a very septic throat, was really due to septicaemia, originated by a carbuncle of the neck. Two of the fatal cases suffered from haemorrhagic diphtheria, 1 of these dying 14 hours after admission. Ten of the fatal cases died of early circulatory failure and 3 of late circulatory failure.

Table showing Type of Diphtheria and Mortality.

Type	Number	Died	Mortality per cent.
Faucial	283	1	0.35
Faucial and nasal	65	9	13.80
Faucial and laryngeal	5	1	20.00
Laryngeal only	4	1	25.00
Laryngeal and nasal	1	1	100.00
Nasal	16	—	—
Nasal and aural	1	—	—
Laryngeal, faucial and nasal	2	—	—
Totals	377	13	3.44

The above table shows, amongst other things, that the diphtheria mortality rate for the year was 3.44 per cent., as compared with 2.3 per cent. in 1932, 4.05 per cent. in 1931, 4.35 per cent. in 1930, 3.58 per cent. in 1929, 3.38 per cent. in 1928, 4.82 per cent. in 1927 and 4.98 per cent. in 1926.

Twelve of the cases of diphtheria were suffering from croup, of whom 4 were cases of pure laryngeal diphtheria, 5 had combined faucial and laryngeal lesions, 2 combined laryngeal, faucial and nasal and 1 combined laryngeal and nasal. Of these, 3 children died. One of them, suffering from faucial and laryngeal lesions, was in steam for 5 days, which relieved the respiratory obstruction, but died of heart failure 20 days after admission. Another, a child of 5 years, admitted with laryngeal and nasal diphtheria on the sixth day of the disease, had the respiratory obstruction immediately relieved by tracheotomy, but collapsed suddenly 30 hours later and died of heart failure. On the remaining fatal case, a marasmic child of 2 years, tracheotomy was performed, but the general condition failed to improve. Nine children received steam alone, of whom 1, the faucial and laryngeal case previously mentioned, died of heart failure in the third week. Another case, a child of 2 years, suffering from laryngeal and faucial diphtheria, was tracheotomized 8 hours after admission and made an uninterrupted recovery. The hospital mortality among the cases of laryngeal diphtheria was therefore 25 per cent.

Types of post-diphtheritic paralysis:—

Type.	Number.
Palatal paresis	19
Pharyngeal paralysis	7
Paralysis of neck muscles	14
Ciliary paresis	1
Paralysis of leg muscles	1
Facial paralysis	2
Total	44

Twenty-three patients in all suffered from paralysis. The paralysis rate was therefore 6.1 per cent., as compared with 5.1 per cent. in 1932, 6.8 per cent. in 1931, 6.2 per cent. in 1930, 9.3 per cent in 1929, 8.8 per cent. in 1928, 6.9 per cent. in 1927 and 6.3 per cent. in 1926.

Circulatory failure occurred in 115 patients. Eighty-two of these showed only slight failure of the circulation as evidenced by soft pulse or weak or irregular heart action. The remaining 33 showed evidence of serious circulatory failure, and 13 of them died.

Table showing Diphtheria Death-rate according to the Day of Disease on which Serum was given.

Day of Disease on which Serum given	Number of Patients	Number of Deaths	Number of Deaths per cent.
1st	9	—	—
2nd	94	3	3.2
3rd	89	2	2.2
4th	86	4	4.6
5th	38	1	2.6
Later than 5th	59	3	5.0
Totals	375	13	3.4

Two of the true cases of diphtheria were admitted with palatal paresis at a late stage of the disease and did not receive serum.

Of the patients who died, 8 were under 5 years and 5 were in the 5-10 years group.

Measles.—One hundred and seven patients were admitted to the hospital as cases of measles, all, with one exception, proving to be true cases of the disease. Six cases intimated as scarlet fever and 1 as diphtheria, which are included in the appropriate sections of this report, proved to be cases of measles. Of the 106 cases of measles, 5 died from broncho-pneumonia, 1 being an infant of 10 months, 2 being 1 year old, one 2 years and another 4 years. The hospital mortality was therefore 4.7 per cent.

The principal complications met with were:—

Laryngitis	2
Broncho-pneumonia	16
Otorrhoea	11
Adenitis	3
Scarlet fever	3
Rhinitis	3
Tonsillitis	1
Conjunctivitis	3
Stomatitis	2
Blepharitis	2
Nephritis	1
Albuminuria	5

Enteric Fever.—Three cases were admitted as likely to be suffering from enteric infection. Of these, one was a true case of infection with *Para-typhosus B.* Another proved to be a case of mucous colitis, repeated bacteriological examinations of the faeces being negative for organisms of the enteric and dysenteric groups, and the third was in reality a case of lobar pneumonia. All three recovered.

Bacillary Dysentery.—Thirteen cases of infection with organisms of the dysentery group were admitted to the wards. All except one were cases of bacillary dysentery, the organism isolated belonging to the group *Flexner W.* The remaining case was a carrier of this organism. It is worthy of note that in recent years sporadic cases and small family outbreaks of dysentery seem to be increasing in Cardiff, and the prevailing organism seems to be *Flexner W.* One of the 12 cases of bacillary dysentery, a child of 18 months, died.

Erysipelas.—Fourteen patients were admitted as cases of erysipelas, all, with the exception of one patient who was suffering from pityriasis rubra, proving to be true cases of the disease. One death occurred amongst the erysipelas cases, a man of 61 years who developed cancrum oris, and died on the fourteenth day of the disease.

Cerebro-Spinal Meningitis.—Fourteen patients were admitted as possible cases of this disease. In two cases the diagnosis proved to be meningococcal meningitis. One of these, a child of 6 months, had been ill for 10 days before admission, and suffered from a concurrent pneumonia. He failed to respond to repeated doses of serum administered intrathecally, and died 26 days after admission in the chronic stage of the disease. The other was a man of 44 years, 21 days ill before admission, who was admitted comatose, and died 2 days later. Three cases (two aged 1 year and one 2 years) proved to be suffering from tuberculous meningitis, and died. Three children, in reality suffering from meningism, responded to lumbar puncture, and recovered. One child was found to have encephalitis lethargica, from which she made a slow but complete recovery. Two children, aged 2 years and 5 years respectively, were suffering from acute poliomyelitis, and died. The remaining 3 cases were finally classified as broncho-pneumonia and enteritis (a child of 5 months who died), lobar pneumonia (a child of 8 months who died), while one child suffered merely from constipation, which speedily responded to treatment.

Anterior Poliomyelitis.—One case, which recovered, was admitted during the year. On discharge the child was referred to the orthopaedic clinic of the Public Health Department.

Mumps.—Two cases were admitted during the year, both making an uninterrupted recovery.

Whooping Cough.—Six cases of this disease were admitted, 5 of them complicated by broncho-pneumonia. Three of the broncho-pneumonia cases, aged respectively 1 year, 2 years and 5 years, died within 4 days of each other, all, it is tragic to record, being members of the same family. One other case, admitted as whooping cough, proved to be a case of laryngismus stridulus and otitis media, and recovered.

Chickenpox.—Four cases were admitted to the wards. All made uneventful recoveries. One of them, a child of 8 years, suffered concurrently from a very severe cellulitis of the face which threatened to destroy the eye, but the condition finally cleared up completely.

Rubella.—No cases were admitted during the year.

Smallpox.—No cases were admitted during the year.

Puerperal Fever and Pyrexia.—Owing to building operations in connection with the extensions of the isolation block, it was necessary to divert cases of puerperal fever to the City Lodge as from June, 1933, and therefore only 8 cases were admitted during the year. Four were cases of puerperal septicaemia, 3 of sapraemia and 1 was in reality suffering from puerperal pyrexia due to pleurisy. All recovered, but one patient developed puerperal mania, necessitating her removal to the City Mental Hospital, where her condition cleared up eventually. As recorded last year, the Remington Hobbs treatment, combined with large doses of scarlatinal antitoxin, yields very favourable results in puerperal cases.

Other Diseases.—In addition to the above-mentioned diseases, there were admitted to the wards 39 patients who were finally classified as follows:—

Lobar pneumonia	...	...	4
Tonsillitis	...	...	11
Bacterial food poisoning (Salmonella group)	...	...	4
Influenzal pneumonia	...	...	2
Laryngitis	...	...	1
Cellulitis	...	...	2
Influenza	...	...	4
Influenza and tonsillitis	...	...	1
Bronchitis	...	...	1
Adenitis	...	...	1
Septic absorption from teeth	...	...	1
Dyspepsia	...	...	1
Quinsy	...	...	1
Double inguinal hernia	...	...	1
Muscular rheumatism	...	...	1
Mastitis	...	...	1
Epilepsy and hypomania	...	...	1
Synovitis	...	...	1
Total	...	...	39

All of these recovered, with the exception of a case of influenzal pneumonia, aged 4 years, who was admitted moribund.

Schick and Dick Tests.—The following table shows the number of scarlet fever patients Schick tested, and the number of diphtheria patients who were Dick tested during the year:—

	Number Positive	Number Negative	Totals	Percentage Positive
Schick Test	181	249	430	42.1
Dick Test	93	85	178	52.2

Active Immunization.—During the year, it was decided to immunize actively against diphtheria all cases admitted to the hospital for conditions other than diphtheria, the written consent of the parent being obtained in each case. For this purpose, 430 true cases of scarlet fever were Schick tested, and, of these, 181 were found to be positive. Of

these, 142 were completely immunized* while in hospital, and 16 were partially immunized, arrangements being made for the completion of the treatment of the latter group at the public health clinics subsequent to discharge of the patients from hospital. In addition, 43 children suffering from other conditions were Schick tested; 26 were found to be positive, 19 were completely immunized* and 6 partially immunized while in hospital.

Another innovation introduced during the year was the employment of measles serum for protecting children exposed to measles by the admission to the diphtheria and scarlet fever wards of cases incubating measles. Owing to the difficulty of securing a large supply of convalescent serum, the pooled serum of healthy young adults was used for the purpose. The blood was voluntarily given by the nursing staff of the hospital and by the junior clerks of both sexes in the Public Health Department. The dose employed varied from 11 to 15 c.c. In all, 34 patients received doses of adult serum and 30 were protected from developing measles. In 4 instances the serum failed to protect, and as this batch of serum seemed to have poor prophylactic properties it was discarded. In preparing the serum and in testing batches for sterility, the ready assistance of Dr. W. Parry Morgan, of the Cardiff and County Public Health Laboratory, is gratefully acknowledged.

Laboratory Work.—During the year, 1,492 bacteriological examinations of various kinds were conducted in the hospital laboratory. These were in the main diphtheria swabs, but included cerebro-spinal fluids, urines, blood counts, blood for Widal reaction, etc.

VIII.—LORD PONTYPRIDD HOSPITAL (DULWICH HOUSE).

Report for 1933 of Chris. J. McSweeney, M.D., M.R.C.P.I., D.P.H.

There were 24 children in hospital at mid-night on 31st December, 1932, and during 1933, 108 cases were admitted and 112 discharged, 20 cases remaining in hospital on 31st December, 1933. One death occurred in the institution during the year—in a girl of 11 years admitted at the end of August with mitral regurgitation of recent origin, who developed a progressive lesion in the aortic valve and died three months after admission. One child was found to be a diphtheria carrier on admission, one child developed diphtheria, and another scarlet fever, when convalescent from rheumatism. These three children were transferred to the City Isolation Hospital.

With the exception of the three infectious cases (two of whom had normal hearts at the time of their transfer) and the child who died, all the other children—128 in number—admitted during the year, or in hospital at the beginning of the year, returned to their homes free of active signs of rheumatism.

The medical reasons for admission of the 108 cases during 1933 were:—

Chorea alone	...	...	...	1
Chorea and early carditis	...	...	...	20
Rheumatic pains alone	...	...	...	2
Rheumatic pains and early carditis	...	...	...	62
Early carditis without pains or choreic symptoms	...	...	...	1
Chorea and valvular disease of the heart	...	...	...	5
Rheumatic pains and valvular disease of the heart	...	...	...	7
Valvular disease of the heart without other rheumatic symptoms	...	...	...	1
Rheumatic pains and chorea with early carditis	...	...	...	8
Rheumatic pains and chorea with valvular disease of the heart	...	...	...	1
Total	...	...	...	108

*Completed full course of immunizing injections and subsequently reacted negatively to the Schick skin test for susceptibility to diphtheria.

The ages of the children varied from 3 to 14 years. Forty-two were boys and 66 were girls. The excess in the number of girls admitted was not quite so marked in 1933 as in the two years preceding, as shown in the following table:—

Year	Boys	Girls	Totals
1929 ...	35	37	72
1930 ...	57	58	115
1931 ...	51	103	154
1932 ...	40	103	143
1933 ...	42	66	108
Totals ...	225	367	592

All the children admitted during 1933 were suffering from some form of acute or sub-acute rheumatism, and in all except three some abnormality of the heart was present. These abnormalities, for the purposes of this report, may be broadly classified into "minor" (denoted by the symbol "h") and "major" ("H"). Preserving the terminology employed in previous reports, the expression "minor cardiac manifestations" denotes the earlier phases of carditis, and children classified as presenting them may be assumed to be free from valvular disease. This early phase of rheumatic carditis is thought to be myocardial in nature, and is evidenced clinically by impairment in the quality of the first sound of the heart, with some enlargement of its chambers. Under treatment, many of these cases clear up completely and the heart returns to normal, but a certain number are left with some appreciable hypertrophy of the ventricles. In the absence of clinical evidence pointing to valvular incompetence, a child presenting, on discharge, residual signs of abnormality in the quality of the heart sounds is graded as "h". Children presenting, either on admission or discharge, the classical signs of a leaking valve are graded as "H". Most of those classed as "h" on admission have become normal on discharge. Roughly, one-third of them remain as "h" and one or two may progress to "H". Children thought to be "H" on admission have occasionally made so much improvement as to merit their being graded "h" on discharge.

The condition of the heart on admission and discharge of the cases admitted or treated to a conclusion during 1933 is set out in the following table:—

Condition of Heart	On Admission	On Discharge
Normal	2	80
Minor cardiac manifestations ("h")	113	34
Major cardiac manifestations ("H")	16	17*
Totals ...	131	131

The following table gives the condition of the heart on admission and discharge of all cases treated to a conclusion since the opening of the hospital in April, 1929:—

Years 1929-33	Condition of Heart			Totals
	Normal	Minor Cardiac Manifestations ("h")	Major Cardiac Manifestations ("H")	
On admission ...	48	428	83	559
On discharge ...	357	128	74	

* Including one death.

As in previous years, the beds of the children were wheeled out on the lawn in settled weather, and during the summer the children lie on their beds all day in the open air, wearing a minimum of clothing. Six children and a nurse sleep out of doors in open-air shelters from April to September. The patients become quite tanned under the open-air regime, and appear to part with their rheumatic manifestations more rapidly when under open-air treatment than when treated in the wards. It is a pity that more open-air shelters are not available, as at present only one-fourth of the patients can sleep out of doors during the summer.

The use of the sedimentation test, introduced in 1932, was continued during 1933, 438 tests being carried out in all. This test, performed by the technique outlined in last year's report, affords useful and reliable evidence of the degree of activity of juvenile rheumatism. As a guide in selecting cases for admission and estimating the fitness of convalescents for discharge the test is of considerable value. As the technique employed does not involve puncture of a vein, it is especially suitable for use on young children, upon whom it is carried out at least once in three weeks during their stay in hospital. Children with acute active rheumatism give readings (at the end of one hour) upwards of 30 mm. and in several cases readings as high as 60 mm. were obtained from children on admission. Before discharge the readings have always fallen to approximately 10 mm. or less. Sub-acute forms of rheumatism yield readings of from 15-30 mm. It is surprising to find that acute chorea, when uncomplicated by rheumatic pains or signs of carditis, is occasionally associated with quite low sedimentation readings. This phenomenon is difficult to explain, but has been observed by other workers. It has not been seen in Cardiff except in uncomplicated choreas.

The further growth of rheumatic supervisory work, to which attention was called last year, is indicated by the figures given below. Owing to departmental medical staff changes, it was found necessary to close the out-patient department at the hospital for the four months September—December, 1933, the patients being examined at the rheumatism supervisory clinics, but full working conditions were resumed before the end of the year.

The following table shows the marked increase in the volume of the supervisory work as compared with the previous year. It will be remembered that the figures for 1932 represented also a great increase on those for the previous year.

	1932.	1933.
Cases remaining under supervision at beginning of year	704	1,124
New cases attending	449	524
Cases remaining under supervision at end of year	1,124	1,467
Cases discharged from supervision during the year because of attaining the age of 14 years	29	119
Total attendances:—		
At Routine Rheumatism Clinics	2,820	2,924
At Out-Patient Clinic	112	95
Routine clinic sessions held	162	187
Out-patient clinic sessions held	35	29*
Average number of attendances at Routine Rheumatism Clinic	17.4	15.6
Average number of new cases at Routine Clinic sessions	4.0	2.8
Average number of attendances at Out-patient Clinic	3.2	3.3

In addition to the 119 cases who ceased to be supervised because of attaining the age of 14 years, 62 other children were discharged from supervision for a variety of reasons, of which the most frequent were family leaving Cardiff, child found to be not rheumatic, or refusal to attend the clinic, etc.

*Out-patient department closed September—December, 1933.

As stated in previous reports, it is proposed to give each year details as to the condition of the heart in all cases ceasing to remain under supervision during that year because of attaining the school-leaving age.

	1932		1933	
	On Ascertainment	On Discharge	On Ascertainment	On Discharge
Normal	5	15	36	72
Minor heart manifestations ("h") ...	17	8	68	32
Major heart manifestations ("H") ...	7	6	15	15
Totals... ..	29	29	119	119

It should be remembered that many of the cases attaining the age of 14 years during 1932 and 1933 had developed valvular heart disease before the inauguration of the rheumatism scheme. For this reason, as explained in previous reports, it is justifiable to expect that the proportion of rheumatic "leavers" having normal hearts should continue to increase in future years. The 1933 figures certainly support this prediction, but it should be borne in mind that there will always be some children who, in spite of every effort to prevent it, will develop permanent heart disease. To reduce this number to the absolute minimum is the aim of the rheumatism supervisory scheme.

The types of heart disease present in the 15 cases having major cardiac manifestations on discharge were:—

Mitral regurgitation	7
Mitral stenosis	7
Aortic regurgitation	1
Total	15

All of these children had developed permanent heart disease at the time of coming under supervision.

One other feature calls for special mention. During 1933, it was decided that all children admitted to the hospital should be protected against diphtheria by active immunization if their parents consented. Consent was readily obtained in every case and Schick testing was commenced on June 6th, 1933. Up to the end of the year, 70 children had been tested; of these, 32 were found to be positive, and all were completely immunized. Eighteen of this number were sufficiently long in hospital to enable the posterior Schick test to be carried out. Arrangements are made for those children who are discharged from hospital before the posterior Schick test falls due, to attend the immunization clinic at the City Hall for testing. Children found to be not completely immune at the posterior Schick receive one further dose of prophylactic.

As this is the last annual report which it will be my privilege to write, it may be permissible to express here a sincere hope for the continued success in the years to come of the Lord Pontypridd Hospital and of the associated rheumatism supervisory scheme.

IX.—LLANDOUGH HOSPITAL.

Llandough Hospital, a municipal general hospital for acute diseases, which is situated in Penarth, near the city boundary, was formally opened by Alderman John Donovan, C.B.E., J.P., Chairman of the Health Committee, on 25th October, 1933.

The hospital, whilst in course of construction, was, by virtue of the Local Government Act, 1929, transferred from the Cardiff Board of Guardians to the Cardiff City Council, by whom it was appropriated under the Public Health Acts Amendment Act, 1907, as from 1st April, 1930, as a hospital for the purposes of the Public Health Acts.

The tabular statements given below show the work undertaken from the date of opening to the end of the year.

(1) Classification of the accommodation for the sick and the number of beds occupied on 31st December, 1933:—

Classification of Wards	Number of Wards	BEDS.							
		Men		Women		Children (under 16 years)		Totals	
		Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied
Medical ...	4	68	62	68	41	—	—	136	103
Surgical ...	4	68	56	68	42	—	—	136	98
Children ...	2	—	—	—	—	68	68	68	68
Totals ...	10	136	118	136	83	68	68	340	269

(2) In-patients:—

1. Total number of admissions	...	...	...	616
2. Total number of deaths among children under one year	...	...	...	10
3. Total number of deaths	...	...	...	47
4. Total number of discharges	...	...	...	300
5. Duration of stay of patients included in 3 and 4 above:—				
(a) Under four weeks...	...	...	...	303
(b) Four weeks and under thirteen weeks	...	...	...	44
(c) Thirteen weeks or more	...	...	...	—
6. Number of beds occupied:—				
(a) Average during the year*	...	...	...	—
(b) Highest	...	...	...	275
(c) Lowest*	...	...	...	—
7. Number of surgical operations under general anaesthetic (excluding dental operations)	...	...	...	149
8. Number of abdominal sections	...	...	...	44

(3) Out-patients:—

Patients discharged from Llandough Hospital who require subsequent surgical dressings attend the Out-patient Department of the City Lodge. Cases (other than emergency cases) admitted to Llandough Hospital are first seen at the City Lodge by medical officers of Llandough Hospital.

* Hospital opened on 25th October, 1933.

(4) Classification of in-patients who were discharged from or who died in the institution during the year:—

Disease Groups	Children (under 16 years)		Men and Women	
	Dis- charged	Died	Dis- charged	Died
Acute infectious disease	2	1	2	—
Influenza	—	—	8	—
Tuberculosis:—				
Pulmonary	4	—	2	1
Non-pulmonary	1	2	3	1
Malignant disease	—	—	6	6
Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea	6	1	3	—
Venereal disease	1	—	1	—
Accidental injury and violence	2	—	10	—
Diseases of the:—				
Nervous system and sense organs	6	2	19	11
Respiratory system	22	2	13	1
Circulatory system	3	—	11	4
Digestive system	14	6	65	1
Genito-urinary system	5	1	50	5
Skin	5	—	8	1
Other diseases	5	—	21	1
Persons not falling under any of the above headings	2	—	—	—
Totals	78	15	222	32

X.—POOR LAW MEDICAL SERVICE.

The following table shows the numbers of attendances of patients at the surgeries of the district medical officers and the visits paid to the homes of patients by these officers during 1933:—

Name of District	Whether Whole- or Part-Time D.M.O.	Attendances of Patients at Surgery	Attendances of Patients at Surgery for Medicine only	Visits to Homes of Patients
Roath	Whole-time	11,480	5,667	9,945
Central	do.	10,729	9,324	2,590
Canton	Part-time	3,079	250	1,549
South	do.	1,531	944	576
Gabalfa	do.	846	966	830
Llanishen	do.	66	20	79
Totals	—	27,731	17,171	15,569

All three totals show a substantial increase over those for 1932, viz., from 25,097 to 27,731 (an increase of 2,634), from 14,047 to 17,171 (an increase of 3,124) and from 12,574 to 15,569 (an increase of 2,995).

The following tabular statements show the hospital provision and the work undertaken during 1933 in connection with the institutional treatment of the sick at the City Lodge and Ely Lodge Poor Law Institutions.

CITY LODGE.

(1) Classification of the accommodation for the sick and the number of beds occupied on 31st December, 1933:—

Classification of Wards	Num- ber of Wards	BEDS							
		Men		Women		Children (under 16 years)		Totals	
		Pro- vided	Occu- pied	Pro- vided	Occu- pied	Pro- vided	Occu- pied	Pro- vided	Occu- pied
Medical (Acute)...	5	47	35	17	11	...	...	64	46
Surgical	4	26	26	26	18	...	...	52	44
Chronic Sick ...	25	215	215	158	131	...	...	373	346
Children	4	...	...	...	...	44*	34	44	34
Venereal Disease	2	12	11	6	3	...	...	18	14
Tuberculosis ...	3	28	28	18	12	...	...	46	40
Maternity	2	...	...	23	7	...	...	23	7
Mental Disease ...	2	6	1	6	...	...	...	12	1
Totals	47	334	316	254	182	44	34	632	532

* Including 34 cots.

(2) In-patients:—

1.	Total number of admissions (including infants born in hospital) ...	4,599
2.	Number of women confined in hospital	173
3.	Number of live births	145
4.	Number of still-births	28
5.	Number of deaths among the newly-born	4
6.	Total number of deaths among children under one year ...	46
7.	Number of maternal deaths among women admitted to hospital for confinement	4
8.	Total number of deaths	750
9.	Total number of discharges	4,133
10.	Duration of stay of patients included in 8 and 9 above:—	
	(a) Under four weeks	3,253
	(b) Four weeks and under thirteen weeks	1,163
	(c) Thirteen weeks or more	467
11.	Number of beds occupied:—	
	(a) Average during the year	739
	(b) Highest	848
	(c) Lowest	532
12.	Number of surgical operations under general anaesthetic (excluding dental operations)	1,168
13.	Number of abdominal sections	377

(3) Out-patients:—

1. Nature and scope of out-patient provision:—Cases after discharge from hospital attend for continuation treatment. Casualties after treatment are referred to private practitioners or, if urgent, admitted to the institution.
2. Total number of persons seen in the out-patient department ... 1,267
3. Number of these persons who were subsequently admitted for in-patient treatment in the institution ... 367
4. Number of these persons who had received in-patient treatment in the institution 390
5. Total number of attendances in the out-patient department ... 5,670

(4) Classification of in-patients who were discharged from or who died in the institution during the year:—

Disease Groups	Children (under 16 years)		Men and Women	
	Dis-charged	Died	Dis-charged	Died
Acute infectious disease	14	2	10	1
Influenza ... ..	...	...	19	...
Tuberculosis:—				
Pulmonary	14	6	119	77
Non-pulmonary	11	4	18	5
Malignant disease ... ..	...	...	80	84
Rheumatism:—				
Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea ...	44	1	27	3
Non-articular manifestations of so-called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica)	4	...	24	1
Chronic arthritis ... ..	...	...	30	1
Venereal disease	1	...	59	...
Puerperal pyrexia ... ..	...	...	...	...
Puerperal fever:—				
Women confined in the hospital ... ..	...	...	...	...
Other cases ... ..	...	...	1	...
Other diseases and accidents connected with pregnancy and child-birth ... ..	...	...	94	4
Mental diseases:—				
Senile dementia ... ..	...	...	25	...
Other	3	...	200	...
Senile decay ... ..	...	...	13	50
Accidental injury and violence	85	3	226	32
Diseases of the:—				
Nervous system and sense organs	56	15	186	15
Respiratory system	94	33	257	43
Circulatory system	14	3	202	227
Digestive system	154	2	511	42
Genito-urinary system	48	1	466	47
Skin	35	...	81	...
Other diseases	224	19	372	21
Mothers and infants discharged from maternity wards (not included above):—				
Mothers ... ..	...	...	181	1
Infants	131	7	...	...
Totals	932	96	3,201	654

ELY LODGE.

(1) Classification of the accommodation and the number of beds occupied on 31st December, 1933:—

Classification of Wards	Number of Wards	BEDS							
		Men		Women		Children (under 16 years)		Totals	
		Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied	Pro-vided	Occu-pied
Mental Disease ...	14 {	160	139	187	188†	35	12	382	339
Mental Defective*		51	46	39	38	4	4	94	88
Other (Infirm) ...		80	55	28	19	1	1	109	75
Totals ...	20	291	240	254	245	40	17	585	502

*The beds earmarked for mental defectives are those recognised for this purpose by the Board of Control. Many of the so-called mentally diseased are really defectives admitted under lunacy orders in terms of Section 24 of the Lunacy Act, 1890.

†Bed transferred in emergency.

(2) In-patients :—

Total number of admissions	...	...	...	...	...	93
Total number of deaths	...	...	...	...	...	57
Total number of discharges	...	...	...	...	...	75

Duration of stay of patients :—

(a) Under four weeks	...	...	...	...	...	22
(b) Four weeks and under thirteen weeks	...	...	...	...	...	18
(c) Thirteen weeks or more	...	...	...	...	...	92

Number of beds occupied :—

(a) Average during the year	...	...	...	...	...	520
(b) Highest	...	...	...	...	...	546
(c) Lowest	...	...	...	...	...	501

(3) Classification of in-patients who were discharged from or who died in the institution during the year :—

Disease Groups	Children (under 16 years)		Men and Women	
	Dis-charged	Died	Dis-charged	Died
Influenza	...	...	...	10
Tuberculosis (Pulmonary)	...	...	...	2
Mental diseases :—				
Senile dementia	...	...	26	42
Other	...	2	...	...
Other diseases	...	1	48	...
Persons not falling under any of the above headings	1	...	...	...
Totals	1	3	74	54

XI.—HOSPITAL ACCOMMODATION.

The following tabular statement shows the amount of hospital accommodation for the sick and others in need of special care provided by the City Council and other bodies, classified according to the type of function each subserves:—

Institution	Total available Beds	Approximate Number available for Cardiff
Llandough Hospital	340	306
Isolation Hospital (including old Smallpox Hospital) ...	151*	151*
Caerau Smallpox Hospital	31†	31†
Flat Holm Hospital (for Cholera, Yellow Fever and Plague) ...	16	16
Lord Pontypridd Hospital (Dulwich House)	25	25
City Lodge Poor Law Institution‡:—		
Acute Diseases	164	
Maternity :—		
Mothers	23	
Infants	14	
Tuberculosis	46	
Mental Cases	12	
Chronic, Aged and Infirm	373	
	632	552
Ely Poor Law Institution‡:—		
Mental Cases (including Mental Defectives)	476	
Chronic, Aged and Infirm	109	
	585	515
Mental Hospital	790	690
Total Rate-provided	2,570	2,286
Cardiff Royal Infirmary:—		
General	380	
Maternity:—		
Mothers	31	
Infants	25	
Convalescent Home	54	
	490	260
Prince of Wales' Hospital:—		
General	64	
Country Branch	72	
	136	12
Royal Hamadryad Seamen's Hospital	74	...
Total Voluntary	700	272
Grand Total	3,270	2,558
Sanatoria and Hospitals of the Welsh National Memorial Association ... ..	...	130

*Total adult accommodation on the basis of 144 sq. ft. per adult bed. This represents about 230 available beds and cots when allowance is made for children under 10 years.

†On the basis of 154 sq. ft. per adult bed, representing about 48 available beds when allowance is made for children under 10 years.

‡The accommodation for chronic, aged and infirm in the City Lodge and Ely Institution fluctuates slightly with requirements. Many of the beds set apart for chronic cases at the City Lodge are really occupied by patients requiring continuous medical or surgical and nursing care. The figures for Ely Institution also include accommodation approved by the Board of Control for mental defectives (about 90) who are chargeable to the Mental Deficiency Committees of the Authorities responsible for their maintenance.

XII.—TUBERCULOSIS.

New Cases of Tuberculosis.—The following tables show the age distribution and localisation of the disease among new cases of tuberculosis* coming to the knowledge of the Department during 1933 :—

Cases of Tuberculosis by Age and Sex.

Age Periods— Years	New Cases					
	Pulmonary			Non-Pulmonary		
	Males	Females	Totals	Males	Females	Totals
0—1	1	...	1	1	3	4
1—5	2	4	6	13	14	27
5—10	6	3	9	8	10	18
10—15	2	4	6	5	9	14
15—20	20	19	39	7	6	13
20—25	33	30	63	3	8	11
25—35	54	36	90	10	6	16
35—45	33	22	55	5	6	11
45—55	27	9	36	3	2	5
55—65	16	3	19	...	...	...
65 and upwards	3	1	4	...	...	...
Totals	197	131	328	55	64	119

Cases of Tuberculosis by Localisation of Disease and Sex.

Form of Tuberculosis	New Cases		
	Males	Females	Totals
Respiratory System	197	131	328
Nervous System	8	14	22
Intestines and Peritoneum	8	7	15
Vertebral Column	6	2	8
Bones and Joints	11	9	20
Other Organs	20	31	51
Disseminated Tuberculosis	2	1	3
Totals	252	195	447

Sources of Ascertainment.—The new cases of tuberculosis were ascertained as follows :—

Source	Pulmonary	Non-Pulmonary	Totals
General Medical Practitioners	114	16	130
Welsh National Memorial Association	122	49	171
Medical Officers of Institutions	75	40	115
Other Medical Officers	6	1	7
Otherwise ascertained	11	13	24
Totals	328	119	447

*Including cases notified after death, deaths of cases not notified and cases ascertained otherwise than by formal notification.

Home Conditions.—A detailed analysis is given below showing the actual living and sleeping conditions within their own tenements of 279 new cases of pulmonary tuberculosis coming to the knowledge of the Department during 1933.

Living accommodation of 279 Patients in Private Houses.

Rooms in Tenement (i.e., house or part of house occupied by one family)	Patients			Total Number of Persons in Household			
	Males	Females	Totals	Over 10 years	Under 10 years	Lodgers	Totals
1 room ...	4	1	5	11	3	...	14
2 rooms ...	22	17	39	77	37	...	114
3 rooms ...	12	18	30	90	42	...	132
4 rooms and over	121	84	205	899	146	5	1,050
Totals ...	159	120	279	1,077	228	5	1,310

In addition to the foregoing 279 cases, there were 16 cases (11 males and 5 females) in institutions and 13 males in lodging houses at the time of notification. Information as to the living accommodation of the remaining 20 cases (14 males and 6 females) could not be ascertained for various reasons.

Sleeping accommodation of 279 Patients suffering from Pulmonary Tuberculosis and living in Private Houses.

Rooms in Tenement (i.e., house or part of house occupied by one family)	Patients				Contacts		
	With Room to Self	With Bed but not Room to Self	With neither Bed nor Room to Self	Totals	Sleeping in same bed as Patient	Sleeping in separate Bed but in same Room as Patient	Totals
1 room ...	2	...	3	5	4	3	7
2 rooms ...	6	3	30	39	34	28	62
3 rooms ...	9	2	19	30	22	14	36
4 rooms and over	105	26	74	205	81	57	138
Totals ...	122	31	126	279	141	102	243

It will be seen that only 122, or 43·7 per cent., of the new cases had sleeping rooms to themselves, and that the number of contacts exposed to infection in the same bedrooms was 243.

Known Cases of Tuberculosis.—The numbers of cases of tuberculosis remaining on the register at the end of 1933 were as follows:—

Pulmonary:—

Males ...	...	...	604
Females	...	...	425
<hr/>			
Total	1,029

Non-Pulmonary:—

Males	244
Females	195
<hr/>			
Total	439
<hr/>			
Grand Total	1,468
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Of the foregoing cases, the numbers who were under observation by the tuberculosis nurses were as follows*:—

Pulmonary:—

Males ...	...	...	511
Females	...	...	372
<hr/>			
Total	...	...	883

Non-Pulmonary:—

Males ...	...	...	211
Females	...	...	176
<hr/>			
Total	...	...	387
<hr/>			
Grand Total	...	...	1,270
<hr/>			

In addition to the cases referred to above, 191 unnotified cases of suspected tuberculosis (107 males and 84 females) were under observation by the nurses at the end of the year.

The number of known cases of tuberculosis (1,468) shows an increase of 43 compared with the number at the end of 1932.

During 1933 the tuberculosis nurses made 439 first visits and 2,310 revisits to the homes of patients.

* Cases regarded as not being under observation are those (1) permanently residing in institutions, (2) temporarily residing in institutions whose home addresses are unknown, (3) who by special request are not visited and (4) who have been "lost sight of."

Deaths.—The numbers of deaths from tuberculosis of the respiratory system and from other forms of tuberculosis during the year were 234 and 47 respectively. The death-rate per 1,000 from tuberculosis of the respiratory system was 1·05 and from other forms of tuberculosis it was 0·21. These death-rates corresponded exactly with those for the previous year. For many years the mortality from tuberculosis in Cardiff has been comparatively high, but there are now signs that it is declining. It is difficult to account with any degree of accuracy for the cause of the lateness of the reduction in the death-rate from tuberculosis in Cardiff, but it is probably due to the comparatively rapid growth of the population during 1850 to 1911, when there was a large influx of immigrants from rural districts. Such immigrants are peculiarly susceptible to tuberculosis when they take up permanent residence in urbanised districts. The death-rate per 1,000 from tuberculosis in Cardiff for the years 1924-1933, as compared with the death-rates for England and Wales for those years, are shown in the following table:—

Year	Death-rate per 1,000 population			
	Tuberculosis of Respiratory System		Other Forms of Tuberculosis	
	Cardiff	England and Wales	Cardiff	England and Wales
1924	1·28	0·80	0·25	0·24
1925	1·33	0·79	0·20	0·23
1926	1·09	0·73	0·19	0·21
1927	1·26	0·74	0·28	0·21
1928	1·01	0·71	0·20	0·20
1929	1·14	0·74	0·18	0·19
1930	0·94	0·68	0·21	0·19
1931	1·06	0·69	0·23	0·18
1932	1·05	0·63	0·21	0·18
1933	1·05	0·69	0·21	0·13

The two following tables show the age distribution and localisation of the disease among the deaths from tuberculosis during the year.

Deaths from Tuberculosis by Age and Sex.

Age Periods—Years	DEATHS					
	Pulmonary			Non-Pulmonary		
	Males	Females	Totals	Males	Females	Totals
0—1	1	...	1	...	2	2
1—5 ... ..	...	2	2	11	5	16
5—10	2	...	2	1	5	6
10—15	1	5	6	1	2	3
15—20	7	15	22	4	1	5
20—25	19	16	35	3	3	6
25—35	40	21	61	1	6	7
35—45	26	17	43	1	...	1
45—55	25	7	32	...	1	1
55—65	18	10	28	...	...	...
65 and upwards	2	...	2	...	...	...
Totals	141	93	234	22	25	47

Deaths from Tuberculosis by Sex and Localisation of Disease.

Form of Tuberculosis	Deaths		
	Males	Females	Totals
Respiratory System	141	93	234
Central Nervous System	7	13	20
Intestines and Peritoneum	3	3	6
Vertebral Column	3	1	4
Other Bones and Joints	2	1	3
Other Organs	3	2	5
Disseminated Tuberculosis	4	5	9
Totals	163	118	281

The number and proportion of cases that died who were previously unknown to the Department will be seen from the following figures:—

	Total Number of Deaths	Deaths of Cases previously unknown	
		Number	Percentage
Pulmonary tuberculosis	234	18	7·7
Non-pulmonary tuberculosis ...	47	21	44·7
Totals	281	39	13·9

Treatment.—The following tables give particulars of the examination and treatment of Cardiff cases under the scheme of the Welsh National Memorial Association during 1933.

1.—WORK OF THE DISPENSARY.

	Pulmonary				Non-Pulmonary				Totals			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—New cases examined during the year (excluding contacts):—												
(a) Definitely tuberculous	132	96	9	8	20	19	15	20	152	115	24	28
(b) Diagnosis not completed ... ..	...	...	...	...	...	...	...	...	10	10	11	17
(c) Non-tuberculous ... ..	...	...	...	...	...	...	...	...	97	115	69	48
B.—Contacts examined during the year:—												
(a) Definitely tuberculous	1	...	...	...	...	...	...	...	1	...	...	...
(b) Diagnosis not completed ... ..	...	...	...	...	...	...	...	...	1	1	...	...
(c) Non-tuberculous ... ..	...	...	...	...	...	...	...	...	25	49	32	40
C.—Cases written off the Dispensary Register as:—												
(a) Recovered	5	9	2	2	1	5	9	7	6	14	11	9
(b) Non-tuberculous (including cases previously diagnosed and entered on the Dispensary Register as tuberculous) ... ..	...	...	...	...	...	...	...	...	133	170	105	99
D.—Number of cases on Dispensary Register on December 31st:—												
(a) Definitely tuberculous	389	235	18	20	68	62	85	73	457	297	103	93
(b) Diagnosis not completed ... ..	...	...	...	...	...	...	...	...	10	15	20	19

1.	Number of cases on Dispensary Register on January 1st	...	...	960
2.	Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	...	...	19
3.	Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	...	...	71
4.	Cases written off during the year as dead (all causes)	...	...	182
5.	Number of attendances at the Dispensary (including contacts)	...	...	6,442
6.	Number of Insured Persons under Domiciliary Treatment on December 31st	...	...	12
7.	Number of consultations with medical practitioners:—			
	(a) Personal	...	...	209
	(b) Other	...	...	910
8.	Number of visits by Tuberculosis Officers to homes (including personal consultations)	...	...	383
9.	Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	...	...	2,003
10.	Number of:—			
	(a) Specimens of sputum examined in connection with Dispensary Work			582
	(b) X-Ray examinations made in connection with Dispensary Work			805
11.	Number of "Recovered" cases restored to Dispensary Register and included in A (a) and A (b) above	...	...	3
12.	Number of "T.B. plus" cases on Dispensary Register on December 31st			476

2.—RESIDENTIAL TREATMENT.

		In Institutions on Jan. 1st	Admitted during the year	Discharged during the year	Died in Institutions	In Institutions on Dec. 31st
Number of doubtfully tuberculous cases admitted for observation	Adult males	...	8	8	...	...
	Adult females	...	2	2	...	...
	Children	3	11	13	...	1
	Totals	3	21	23	...	1
Number of definitely tuberculous patients admitted for treatment	Adult males	56	158	102	15	97
	Adult females	32	106	78	15	45
	Children	27	46	38	4	31
	Totals	115	310	218	34	173
Grand Totals		118	331	241	34	174

3.—RESULTS OF OBSERVATION OF DOUBTFULLY TUBERCULOUS CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS.

(a) Sanatorium and Hospital (Pulmonary Cases).

Diagnosis on discharge from Observation			Stay under 4 weeks			Stay over 4 weeks			Totals		
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	...	..	1	1	...	1	...	2	2	1	2
Non-tuberculous	...	..	1	...	...	...	.	1	1	...	1
Doubtful	...	..	...	...	...	1	...	3	1	...	3
Totals	...	..	2	1	...	2	...	6	4	1	6

(b) Hospital (Non-Pulmonary Cases).

Diagnosis on discharge from Observation			Stay under 4 weeks			Stay over 4 weeks			Totals		
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	...	...	1	...	2	...	...	3	1	...	5
Non-tuberculous	...	...	1	...	...	2	...	1	3	...	1
Doubtful	...	...	...	...	1	...	1	...	...	1	1
Totals	...	..	2	...	3	2	1	4	4	1	7

4.—IMMEDIATE RESULTS OF TREATMENT OF DEFINITELY TUBERCULOUS PATIENTS DISCHARGED FROM RESIDENTIAL INSTITUTIONS.

(a) Sanatorium (Pulmonary Cases).

Condition at time of Discharge			Duration of Residential Treatment												Totals
			Under 3 months			3-6 months			6-12 months			More than 12 months			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Quiescent	...	...	...	...	...	5	9	1	2	3	...	2	...	1	23
Not Quiescent	...	...	4	3	2	10	12	...	14	5	...	10	...	...	60
Died	...	..	...	...	...	1	...	...	...	...	...	3	...	...	4
Totals	...	...	4	3	2	16	21	1	16	8	...	15	...	1	87

(b) Hospital (Pulmonary Cases).

Condition at time of Discharge				Duration of Residential Treatment												Totals
				Under 3 months			3-6 months			6-12 months			More than 12 months			
				M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Quiescent ...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	3
Not Quiescent	...	...	17	21	3	16	14	2	10	5	...	...	...	...	88
Died	...	...	6	9	1	3	2	1	1	3	...	...	1	...	27
Totals ...				24	30	4	20	16	3	12	8	1	...	118

(c) Hospital (Non-Pulmonary Cases).

Condition at time of Discharge	Duration of Residential Treatment												Totals
	Under 3 months			3-6 months			6-12 months			More than 12 months			
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Quiescent ... ..	...	...	3	1	...	2	...	2	2	1	1	5	17
Not Quiescent	5	3	8	1	...	5	1	...	2	...	...	2	27
Died ... ..	...	...	...	1	...	...	...	...	1	...	...	1	3
Totals	5	3	11	3	...	7	1	2	5	1	1	8	47

XIII.—VENEREAL DISEASES.

The following is a summary of the returns for 1933 from treatment centres established under the Public Health (Venereal Diseases) Regulations, 1916:—

	Cardiff Royal Infirmary	Royal Hamadryad Seamen's Hospital*	Auxiliary Centre for Mothers and Children	Institutions outside Cardiff	Totals
A. Number of persons residing in Cardiff dealt with during the year for the first time and found to be suffering from:—					
Syphilis	153	194	47	3	397
Soft Chancre	2	86	...	1	89
Gonorrhoea	265	255	89	2	611
Conditions other than Venereal	127	14	107	4	252
Totals	547	549	243	10	1,349
B. Number of attendances of all patients residing in Cardiff	11,642	9,918	3,924	57	25,541
C. Aggregate number of "in-patient days" of all patients residing in Cardiff ... ..	...	2,220	...	82	2,302
D. Number of doses of arsenobenzene compounds given to patients residing in Cardiff	1,791	776	427	3	2,997

Examination of pathological material from patients residing in Cardiff and patients at institutions in or belonging to Cardiff:—

	Microscopical		Serum Tests		
	Spiro- chetes	Gono- cocci	Wasser- mann	Others for Syphilis	For Gonor- rhoea
Specimens examined at Treatment Centres:—					
Cardiff Royal Infirmary ... ..	...	316	605	...	...
Royal Hamadryad Seamen's Hospital* ...	25	94	...	...	...
Specimens examined at the Cardiff and County Public Health Laboratory from:—					
Treatment Centres:—					
Royal Hamadryad Seamen's Hospital* ...	1	14	230	...	..
Auxiliary Centre for Mothers and Children	2	369	139	...	...
Public Health Department ... ..	...	5	973	...	...
Other sources	3	144	1,152	...	...
	6	532	2,494		
Totals	31	942	3,099	...	...

*The figures relate to seamen only, whether residents of Cardiff or not.

Results of Treatment.—The following summaries, relating to *all persons* treated during 1933, have been prepared from the annual returns of the clinical officers.

Cardiff Royal Infirmary.

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Totals			Per-centage
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Both Sexes	
(1) Number of cases on 1st January under treatment or observation ...	155	236	2	...	186	72	32	8	375	316	691	50.0
(2) Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection ...	5	...	...	...	4	...	...	...	9	...	9	0.7
(3) Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:—												
Syphilis, primary ...	71	5	...	...	...	...	...	...	71	5	76	5.5
" secondary ...	10	9	...	...	...	...	...	...	10	9	19	1.4
" latent in 1st year of infection ...	5	4	...	...	...	...	...	...	5	4	9	0.7
" all later stages ...	32	18	...	...	...	...	...	...	32	18	50	3.6
" congenital ...	7	9	...	...	...	...	...	...	7	9	16	1.2
Soft Chancre ...	...	...	2	...	...	...	...	...	2	...	2	0.1
Gonorrhoea, 1st year of infection ...	...	...	...	...	249	29	...	...	249	29	278	20.1
" later ...	...	...	...	...	12	8	...	...	12	8	20	1.4
Conditions other than venereal ...	...	...	...	...	...	...	159	10	159	10	169	12.2
(4) Number of cases dealt with for the first time during the year under report known to have received treatment at other centres for the same infection ...	17	5	...	...	16	5	...	...	33	10	43	3.1
Totals ...	302	286	4	...	467	114	191	18	964	418	1,382	...
(5) Number of cases discharged after completion of treatment and final tests of cure ...	31	7	1	...	87	9	152	10	271	26	297	21.5
(6) Number of cases which ceased to attend before completion of treatment and were on first attendance suffering from:—												
Syphilis, primary ...	9	11	...	...	...	...	...	...	9	11	20	1.5
" secondary ...	2	8	...	...	...	...	...	...	2	8	10	0.7
" latent in 1st year of infection ...	5	1	...	...	...	...	...	...	5	1	6	0.4
" all later stages ...	8	12	...	...	...	...	...	...	8	12	20	1.5
" congenital ...	2	3	...	...	...	...	...	...	2	3	5	0.4
Soft Chancre ...	...	...	1	...	...	...	...	...	1	...	1	0.0
Gonorrhoea, 1st year of infection ...	...	...	...	...	133	17	...	...	133	17	150	10.8
" later ...	...	...	...	...	11	4	...	...	11	4	15	1.1
(7) Number of cases which ceased to attend after completion of treatment but before final test of cure ...	33	17	...	...	44	5	...	...	77	22	99	7.2
(8) Number of cases transferred to other centres or to institutions, or to care of private practitioners ...	12	11	...	...	14	14	...	...	26	25	51	3.7
(9) Number of cases remaining under treatment or observation on 31st December ...	200	216	2	...	178	65	39	8	419	289	708	51.2
Totals ...	302	286	4	...	467	114	191	18	964	418	1,382	...

Royal Hamadryad Seamen's Hospital (Seamen only).

	Syphilis	Soft Chancre	Gonorrhoea	Conditions other than Venereal	Totals	Per- centage
(1) Number of cases on 1st January under treatment or observation ...	38	16	57	...	111	15·2
(2) Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	26	4	41	...	71	9·7
(3) Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:—						
Syphilis, primary	81	...	...	...	81	11·1
,, secondary	24	...	...	...	24	3·3
,, latent in 1st year of infection ... ..	...	...	...	...	...	...
,, all later stages... ..	10	...	...	...	10	1·4
,, congenital ... ..	...	...	...	...	...	...
Soft Chancre ... ..	...	69	...	...	69	9·4
Gonorrhoea, 1st year of infection ... ..	...	...	171	...	171	23·4
,, later ... ..	...	...	26	...	26	3·5
Conditions other than venereal ... ..	...	...	...	14	14	1·9
(4) Number of cases dealt with for the first time during the year under report known to have received treatment at other centres for the same infection	79	17	58	...	154	21·1
Totals	258	106	353	14	731	...
(5) Number of cases discharged after completion of treatment and final tests of cure	42	55	56	14	167	22·8
(6) Number of cases which ceased to attend before completion of treatment and were on first attendance suffering from:—						
Syphilis, primary	77	...	...	...	77	10·5
,, secondary	12	...	...	...	12	1·6
,, latent in 1st year of infection ... ..	...	...	...	...	...	...
,, all later stages	4	...	...	...	4	0·5
,, congenital ... ..	...	...	...	...	...	...
Soft Chancre ... ..	...	21	...	...	21	2·9
Gonorrhoea, 1st year of infection ... ..	...	...	99	...	99	13·6
,, later ... ..	...	...	26	...	26	3·6
(7) Number of cases which ceased to attend after completion of treatment but before final test of cure	38	...	47	...	85	11·6
(8) Number of cases transferred to other centres or to institutions, or to care of private practitioners	37	12	69	...	118	16·2
(9) Number of cases remaining under treatment or observation on 31st December	48	18	56	...	122	16·7
Totals	258	106	353	14	731	...

During the year, 1,143 doses of arsenobenzene compounds were supplied in 62 instances to 24 individual medical practitioners (other than at treatment centres).

XIV.—MATERNITY AND CHILD WELFARE.

Notification of Births and Still-births.—The following statement shows the numbers of births and still-births notified as having occurred in Cardiff during the year:—

			<i>Births.</i>		<i>Still-births.</i>
By Medical Practitioners	...	...	40	...	—
By Midwives	...	...	2,440	...	100
By Queen's Institute of District Nursing			525	...	17
By Parents	...	...	13	...	—
From Cardiff Royal Infirmary	...		536	...	69
From City Lodge Hospital	...		145	...	38
Totals	...		3,699*	...	224†

Child Welfare Consultations.—The following is a record of the attendances at the 10 child welfare centres:—

Number of Sessions	ATTENDANCES					Average Attendance at each Session
	Children under 1 year		Children 1 year to 5 years		Total	
	First	Subsequent	First	Subsequent		
693	2,063	19,072	338	8,145	29,618	43

The total number of children who attended at the centres during the year was as follows:—

Children under 1 year at end of year	...	...	2,355
Children between 1 year and 5 years at end of year			2,443
Total	...		4,798

The 1931 Census gave the population of Cardiff for the ages 0-5 as 17,642. The total number of children of this age period attending the child welfare centres in 1933 was 4,798. The proportion of the 0-5 age group of Cardiff's population attending the child welfare centres in 1933 was therefore approximately 27·2 per cent.

The following tabular statement shows the conditions found by medical officers in 1,972 infants under one year and 325 children between one and five years who were examined for the first time during 1933, and also the diseases or defects discovered subsequent to the first examination of children attending the consultations for the first time during 1933 or previously:—

*Including 305 not belonging to Cardiff.

† „ 42 „ „ „ „

	Examined for first time		Diseases or Defects found in Children not attending for the first time.	
	Under 1 year	1 year and over	Under 1 year	1 year and over
Number examined :—				
Normal	1,328	92	...	...
Individual cases found with Diseases or Defects ...	644	233	...	...
Diseases or Defects found :—				
Injury at Birth	5	...	...	...
Congenital Malformation or Defect	57	8	16	6
Prematurity	52	...	...	...
Congenital Debility	20	...	3	2
Malnutrition (cause not specified) or Debility (not congenital)	78	12	33	37
Anaemia (cause not specified)	4	4	29	27
Diseases or Defects of :—				
Skin (Non-syphilitic) :				
Systemic	53	2	163	85
Contagious	11	11	72	85
Irritative	52	5	171	60
Eye: Ophthalmia Neonatorum	14	1	7	1
Squint	3	13	10	33
Other	21	9	59	67
Ear: Otorrhoea	15	7	75	62
Other	2	3	18	19
Nose and Throat :				
Enlarged Tonsils and/or Adenoids ... ..	...	29	14	87
Other	18	6	89	46
Heart and Circulation: Congenital	3	...	2	5
Rheumatic ... ..	...	3	...	3
Other	2	1	3	3
Respiratory System (non-tuberculous)	47	18	360	147
Digestive System: Hernia—Umbilical	100	4	47	13
Other	13	14	22	12
Other Diseases	172	2	727	252
Nervous System: Chorea	1	2	...	5
Other	1	5	11	36
Genito-urinary System: Phimosis	32	8	41	12
Other	12	4	22	49
Tuberculosis: Pulmonary—				
Definite	1	...	1	1
Suspected ... ..	...	...	2	1
Non-Pulmonary ... ..	...	2	1	2
Defective Teeth	1	70	9	238
Rickets	8	18	22	73
Other Deformities	9	8	18	38
Rheumatism (not Cardiac or Nervous) ... ..	...	1	1	14
Syphilis	1	...	2	1
Other Diseases or Defects	37	17	42	76

Ante-natal Consultations.—The record of attendances at the 3 ante-natal clinics is given in the following statement:—

Number of Sessions	ATTENDANCES					Average Attendance at each Session
	Expectant Mothers		Post-natal Cases		Total	
	First	Subsequent	First	Subsequent		
235	1,418	4,125	64	24	5,631	24

Of the women who attended the consultations for the first time during the year, 71 were found not pregnant. Miscarriages occurred in 21 instances and still-births in 7 instances. Twin births occurred in 18 cases.

An analysis of new cases (definitely pregnant) attending the clinics and who were confined during 1933 is given below.

Type of case:—

Primiparae	...	...	...	...	406
Multiparae	...	...	...	...	911
Total	...	...	...	...	1,317

Of these 1,317 cases, 689 were found to be suffering from 920 diseases, abnormalities or defects, as follows:—

Abnormalities of the thyroid gland	...	...	...	13
Albuminuria	...	...	...	54
Anaemia	...	...	...	16
Chorea	...	...	...	3
Conditions requiring caesarean section	...	...	...	7
" " induction	...	...	...	8
" " version	...	...	...	30
Contracted pelvis	...	...	...	58
Debility	...	...	...	17
Dental defects requiring treatment	...	...	...	357
Epilepsy	...	...	...	1
Foetal abnormality	...	...	...	5
Haemorrhage	...	...	...	31
Haemorrhoids	...	...	...	4
Heart conditions	...	...	...	22
Hydrometra	...	...	...	9
Malnutrition	...	...	...	5
Oedema	...	...	...	56
Phlebitis	...	...	...	1
Pyelitis	...	...	...	1
Respiratory diseases	...	...	...	10
Skin diseases	...	...	...	8
Vaginal discharge	...	...	...	125
Varicose veins	...	...	...	55
Vomiting	...	...	...	18
Other diseases	...	...	...	6
Total	...	...	...	920

Place of confinement:—

Private dwelling houses	...	...	...	693
Maternity Hospital (Cardiff Royal Infirmary)	...	...	...	469
City Lodge Hospital	...	...	...	67
Private Maternity Homes	...	...	...	12
Outside Cardiff	...	...	...	48
Not traced	...	...	...	28
Total	...	...	...	1,317

Since June, 1925, pregnant women attending the ante-natal clinics have been subjected to a blood examination for syphilis, viz., the Wassermann reaction. During 1933 such routine tests were made in 836 cases, of whom 13, or 1.5 per cent., were found to be positive.

Maternity Hospital.—The number of expectant mothers in necessitous circumstances, or suffering from abnormalities of pregnancy, and emergency cases admitted to the Maternity Hospital (Cardiff Royal Infirmary) were as follows:—

Complicated cases sent by General Practitioners	...	...	47
Cases admitted through Ante-natal Clinics	...	...	417
Total	...	...	464

Maternity and Nursing Homes.—At 31st December, 1933, there were 23 registered nursing homes, 13 providing for maternity cases only, 6 providing for surgical and/or medical cases only and 4 providing for both maternity and other cases. The total number of beds in the registered nursing homes was 156, of which 74 were available for maternity cases. Five homes for which application for registration was made during 1933 were duly registered after careful inspection and remedy of defects.

Extra-Domiciliary Confinement.—The number and proportion of births belonging to Cardiff and registered in Cardiff as having occurred away from private dwelling-houses during 1933 are given below:—

Place of Birth	Number	Number per 1,000 Births
Cardiff Royal Infirmary	398	116
City Lodge Hospital	125	36
Private Nursing and/or Maternity Homes	182	53
Totals	705	205

Dental Clinic.—The following is a record of the year's work:—

	Mothers	Children	Totals
Inspected	290	284	574
Treated	276	276	552
Attendances:—			
For inspection	312	270	582
For treatment	1,386	307	1,693
Teeth extracted	3,445	914	4,359
Teeth filled	7	23	30
Dressings	26	1	27
Scalings	39	2	41
Anaesthetics administered:—			
General	489	297	786
Local	70	...	70
Supplied with dentures	177	...	177
Dentures supplied:—			
Full upper	171	...	171
Partial upper	...	...	...
Full lower	153	...	153
Partial lower	12	...	12

Domiciliary Visits by Health Visitors.—The following is a summary of the visits by the health visitors in connection with maternity and child welfare:—

Births—First visits	...	...	...	...	3,231
Births and infant deaths—Combined visits	...	...	...	...	90
Infant death investigations	...	...	...	...	138
Still-birth investigations	...	...	...	...	159
Subsequent visits	...	{	Infants under one year	...	6,449
			Children over one year	...	7,511
Ante-natal cases	...	{	First visits	...	155
			Re-visits	...	60
Post-natal cases	...	{	First visits	...	931
			Re-visits	...	16
Communicable Diseases:—					
Ophthalmia Neonatorum	{	First visits	...	...	27
		Re-visits	...	...	47
Measles	{	First visits	...	...	1,309
		Re-visits	...	...	77
Whooping Cough	{	First visits	...	...	153
		Re-visits	...	...	...
Mumps	{	First visits	...	...	54
		Re-visits	...	...	...
Financial inquiries	...	...	...	...	743
Other visits	...	...	...	...	4,433
Total					25,584

As mentioned in the report for 1932, the number of health visitors provided was insufficient to overtake all the visiting of children between the ages of one and five years that should be undertaken. Arrangements, however, were made during the year whereby the number of health visitors would be increased by two as from the commencement of 1934.

Milk for Mothers and Children.—Milk was supplied free of charge in necessitous cases and on medical certificates to the following extent:—

	Fresh Milk— Grade A (T.T.)		Dried Milk	
	Applications for a month's supply	Pints Granted	Applications for a month's supply	Pounds Granted
Children	1,140	36,460	393	2,538
Expectant Mothers	242	7,083	...	...
Nursing Mothers	821	25,450	...	...
Totals	2,203	68,993	393	2,538

Training of Midwives.—Owing to the fact that there is now no shortage of midwives in Cardiff, the arrangements hitherto in force whereby the City Council assisted candidates to obtain practical training in midwifery have been discontinued. Only two free studentships in theoretical training at the Welsh National School of Medicine were awarded during 1933.

Midwives Practising in Cardiff.—The number of midwives practising in Cardiff at the end of the year was 106. They may be classified as follows:—

According to qualifications:—

<i>Bona fide</i>	9
Certificate of Central Midwives Board	97
<hr/>	
Total	106
<hr/>	

According to type of practice:—

Attached to public institutions	24
Conducting private nursing or maternity homes	14
Dealing with less than five cases per annum	18
Monthly nurses	4
Others	46
<hr/>	
Total	106
<hr/>	

Officers of the Department made 163 visits of inspection of midwives, and midwives' appliances, etc., were disinfected in 3 instances.

The following is a record of the practice of midwives in Cardiff during the year in relation to the births which were the subject of visits by the health visitors:—

Attendances at births by midwives* as ascertained by health visitors:—

(a) Alone	1,528
(b) With a medical practitioner:—	
(i) Medical practitioner engaged	588
(ii) Medical practitioner called in emergency	681

Attendances at still-births by midwives*:—

(a) Alone	39
(b) With a medical practitioner:—	
(i) Medical practitioner engaged	29
(ii) Medical practitioner called in emergency	43

Medical Practitioners called in by Midwives in Emergency.—During the year the number of instances in which medical practitioners were called in by midwives in emergency was 1,076, and claims for emergency fees were made by practitioners in 773 cases. The fees claimed totalled £1,161 3s. 0d. and in 114 instances fees amounting to £133 18s. 8d. were reclaimed from the responsible persons. The sum actually recovered during the year was £87 9s. 3d.

*Other than those engaged in midwifery at the Cardiff Royal Infirmary and the City Lodge Hospital.

The following statement gives the reasons for medical help being summoned by midwives:—

(1) MOTHER.—

(a) *Pregnancy*—

Miscarriage (including abortion)	67
Haemorrhage	34
Albuminuria and oedema and other toxic causes ...	43
Other causes	21
	— 165

(b) *Labour*—

Abnormal presentation	42
Premature labour	24
Obstructed and delayed labour	342
Placenta praevia, ante-partum haemorrhage and eclampsia, and other toxic causes	62
Post-partum haemorrhage and retained and adherent placenta	56
Ruptured perineum	132
Other causes	16
	— 674

(c) *Lying-in*—

Pyrexia, secondary post-partum haemorrhage and phlegmasia and other septic causes	48
Other causes	29
	— 77

(2) INFANT.—

Debility	46
Inflammation of or discharge from eyes	61
Other causes	53
	— 160

Total 1,076

Puerperal Fever and Puerperal Pyrexia.—Statistics as to the number of cases of puerperal fever and puerperal pyrexia notified during the year under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, are given in the section dealing with notifiable diseases (page 11), but as the work involved comes within the province of maternity and child welfare it is referred to here. Thirty-nine cases of puerperal fever and 54 cases of puerperal pyrexia were notified, 6 of the former and 1 of the latter being removed to the Isolation Hospital for treatment. General practitioners sought the assistance of the Department in several cases, but no specialist consultation took place during the year.

Home Nursing.—The following is a record of the work done by the Queen's Institute of District Nursing for the maternity and child welfare section of the Department:—

Disease or Defect	Cases carried over from 1932		Cases referred for Treatment during 1933		Totals	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin:—Impetigo ... ..	...	...	11	175	11	175
Other Skin Diseases ... ..	...	...	9	265	9	265
Eye:—Ophthalmia Neonatorum ...	2	9	12	440	14	449
Other Eye Defects	4	181	46	861	50	1,042
Minor Ear Defects ... ..	...	...	17	371	17	371
Miscellaneous	4	61	101	1,728	105	1,789
Totals	10	251	196	3,840	206	4,091

Maternity Bags.—Maternity bags were lent by the Department in 19 necessitous cases.

Home Helps.—Home Helps were provided by the Department in 124 cases in which mothers confined at home were without adequate domestic help and without means of obtaining it.

Crippling Defects and Orthopaedics.—The following is a summary of the work carried out at the orthopaedic clinic during 1933:—

	Children under School Age.
<i>Consultation Clinic:—</i>	
Examined for first time	128
Recommended for treatment and/or appliances for first time	87
Recommended for further treatment and/or appliances	69
<i>Recommendations for:—</i>	
Treatment in Hospital	10
Treatment at Clinic (Special and Routine) ...	64
Appliances	11
Alterations to appliances	4
Special boots	4
Alterations to boots	60
Other forms of treatment	9
Treated at Clinic for first time	34
Attendances at Clinic	472
<i>Routine Treatment (massage, electricity, exercises, etc.):—</i>	
Treated at Clinic for first time	46
Attendances for routine treatment	1,051

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1933:—

	Children under School Age.
<i>Hospital Treatment:—</i>	
Admitted to Prince of Wales' Hospital—	
(a) Day cases	1
(b) Other cases	13
Under treatment at Prince of Wales' Hospital at end of 1933	2
On Prince of Wales' Hospital waiting list at end of 1933:—	
(a) Day cases	—
(b) Other cases	4
<i>Other treatment or provision (including appliances, etc., provided following hospital treatment):—</i>	
Appliances provided	31
Appliances altered	5
Special boots provided	—
Alterations to boots	38
Other forms of treatment provided	9

The cases examined at the orthopaedic clinic for the first time during the year have been classified as follows:—

<i>Diseases or Defects.</i>	<i>Number.</i>
Flat feet	28
Bow legs	26
Talipes	19
Rickets	10
Acute anterior poliomyelitis	2
Spastic paralysis	4
Congenital malformation or deformity	4
Congenital dislocation of hip	2
Torticollis	4
Perthes' disease	1
Knock knee	3
Metatarsus varus and intoeing	11
Coxa vara	1
Tuberculous disease	3
Other defects	11
Total	129

The following is a classification of the cases discharged during the year:—

<i>Reason.</i>	<i>Number.</i>
Cured	81
Improved	12
Unlikely to benefit further	3
Left the district	2
Other reasons (including trivial defects)	29
Total	127

Nose and Throat Defects.—The following is a summary of the work done in connection with the treatment of children under school age suffering from enlarged tonsils and/or adenoids:—

Examined for first time	140
(a) Recommended for operative treatment	16
(b) Recommended for other forms of treatment	69
(c) Found to be normal	15
(d) Recommended for re-examination	40
Received operative treatment	17
Received other forms of treatment	20
Total attendances	271

Visual Defects.—The following statement summarises the work done in connection with the examination of visual defects in children under school age:—

Attended for first time... ..	78
Requiring examination for errors of refraction:—	
(a) Examination for errors of refraction completed	49
(b) For whom spectacles were prescribed	46
For whom spectacles were provided:—	
(a) By parents	36
(b) By Council free of charge	6

Requiring examination for other eye defects:—

(a) For whom treatment was prescribed	...	...	24
(b) For whom treatment was provided	...	...	24
Found to be normal	...	...	3
Total attendances	...	...	194

Measles.—The hospital treatment of cases of measles under five years of age is undertaken as part of the maternity and child welfare scheme of the Council. Particulars as to the cases admitted to hospital during 1933 are contained in the report on the Isolation Hospital (page 16).

Venereal Diseases.—Tabular statements relating to the work of the auxiliary treatment centre for mothers and children are included in the section dealing with venereal diseases (page 41).

Radiography.—The number of individual cases referred from the maternity and child welfare centres for radiography was 113, the total number of skiagrams taken being 128. The parts of the body that required X-ray examination in the 113 cases were as follows:—

Chest	...	...	...	...	1
Shoulder	...	...	...	...	1
Elbow	...	...	...	...	1
Wrist	...	...	...	...	97
Hand	...	...	...	...	3
Hip	...	...	...	...	12
Thigh	...	...	...	...	1
Foot	...	...	...	...	5
Skull	...	...	...	...	1
Total					122

Artificial Sunlight Treatment.—The number of children under 5 years of age treated by artificial sunlight for the first time and their ailments are shown in the following table:—

<i>Diseases.</i>						<i>Children.</i>
Debility	...	...	...	...	...	9
Debility and anaemia	...	...	...	...	...	2
Malnutrition	...	...	...	...	...	7
Nervous debility	...	...	...	...	...	3
Rickets	...	...	...	...	...	22
Other diseases	...	...	...	...	...	5
Total						48

The total number of attendances of children for treatment was 592. Twenty-eight expectant mothers also received treatment for the first time, the total number of attendances being 258.

Infant Life Protection.—The following statement gives particulars of the numbers of persons and children registered at the end of 1933 and visits by the visitor specially engaged in this work during the year:—

Persons on the register who were receiving children for reward at the end of the year	74
Children on the register :—	
(a) At the end of the year	78
(b) Who died during the year	2
First visits	11
Routine visits	789
Special visits :—	
(a) Illegitimate infants	9
(b) Others	145

Adoption of Children Act, 1926.—The visitor specially engaged in duties in connection with infant life protection dealt with 13 cases during the year in which the Council acted as guardian *ad litem*.

XV.—LABORATORY WORK.

Cardiff and County Public Health Laboratory.—The numbers of specimens and samples examined during 1933 for Cardiff were as follows:—

Bacteriological Examinations:—

Water Supplies	299
Milks for Tubercle Bacilli	360
Milks for General Examination	822
Ice Creams for General Examination	70
Sputa for Tubercle Bacilli	1,212
Urines for Tubercle Bacilli	25
Rodents for Plague	301
Specimens for :—	
Diphtheria	4,055
Enteric Fever (Serum)	55
Enteric Fever (Other Specimens)	13
Dysentery	87
Food Poisoning Organisms	92
Gonorrhoea	532
Syphilis (Wassermann Reaction)	2,494
Syphilis (Spirochaeta Pallida)	6
Ringworm	1
Cerebro-Spinal Fluids	52
Other Examinations	180

Chemical Examinations:—

Water Supplies	257
Milk and Milk Products	74
Ice Cream	66
Air of Cinemas	19
In connection with Atmospheric Pollution	60
In connection with Ultra-Violet Radiation	380
Other Examinations	14

Total 11,526

The numbers of specimens examined for suspected disease in patients resident in Cardiff, together with the results, are shown below :—

Suspected Disease	Positive Results	Negative Results	Totals	Percentage of Positive Results
Diphtheria	574	3,481	4,055	14.2
Enteric Fever	5	63	68	7.4
Tuberculosis (Respiratory)	296	916	1,212	24.4
Gonorrhoea	49	483	532	9.2
Syphilis—				
Wassermann Reaction	305	2,189	2,494	12.2
Spirochaeta Pallida	3	3	6	50.0

XVI.—HOUSING.

The following is a statement in the form required by the Ministry of Health in relation to housing:—

1. *Inspection of Dwelling-houses during the Year:—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	8,475
(b) Number of inspections made for the purpose	20,828
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925... ..	1,164
(b) Number of inspections made for the purpose	2,790
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	207
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	2,822

2. *Remedy of Defects during the Year without Service of formal Notices:—*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers... ..	2,622
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3. *Action under Statutory Powers during the Year:—*

(a).—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	29
(2) Number of dwelling-houses which were rendered fit after service of formal notices:—	
(a) By owners	25
(b) By local authority in default of owners	4
(b).—Proceedings under Public Health Acts:	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	319
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—	
(a) By owners	338
(b) By local authority in default of owners	—
(c).—Proceedings under Sections 19 and 21 of the Housing Act, 1930:	
(1) Number of dwelling-houses in respect of which Demolition Orders were made	—
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	—
(d).—Proceedings under Section 20 of the Housing Act, 1930:	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	—
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

House Inspection.—The results of all recorded house inspections during the year have been summarised in the following statement, with the object of showing the various conditions found to exist in working-class property.

Structurally separate dwellings inspected and recorded	...	1,164
Number overcrowded as measured by:—		
Air-space standard*	...	25
Undesirable intermingling of sexes†	...	26
Registrar-General's standard‡	...	49
Number with:—		
One family	...	801
Two families	...	326
Three families	...	31
More than three families	...	6
Without through ventilation	...	2
Without satisfactory washing accommodation	...	140
Without satisfactory cooking arrangements	...	12
Without proper food pantries	...	908
Without troughs	...	266
Dampness from:—		
Defective roofs, shutters or downpipes	...	216
Defective outside plastering or joints	...	113
Lack of, or defective, damp-proof courses	...	34
With earth or pail closets	...	7
Drained to cesspools	...	7
Without flushing cisterns	...	630
With flushing cisterns out of repair	...	24
Without covered galvanised iron ash-bins	...	1,045

Multiple Tenancy.—For comparison with the records of inquiries made in previous years, the following summary is given of the living conditions of families coming under the observation of the Department in relation to multiple tenancy:—

<i>Source of Information.</i>	<i>Number of Houses.</i>	<i>Percentage occupied by more than One Family.</i>
Birth records	3,099	54.0
Tuberculosis records	403	44.7
Housing records	1,164	31.2

These records of multiple tenancy have been kept regularly since 1928, and notwithstanding the provision of new houses by the City Council and by private enterprise, the proportion of houses occupied by more than one family has not been reduced.

Housing Act, 1930.—A further survey of the city was carried out for the purpose of ascertaining the number of houses that were unfit for human habitation and incapable of being made fit at a reasonable cost. A total of 207 houses in such a condition were eventually scheduled for demolition. The policy of the City Council has been to group as many as possible of these houses into areas so that they could be dealt with under Part I of the Act. Representations have been made regarding 17 clearance areas, having a total of 151 houses and 7 other buildings. The houses in these areas contain

* At least 300 c. ft. per adult and 150 c. ft. per child under 10 years of age in bedrooms.

† Where two or more persons of the opposite sex, each over 13 years of age, excluding married couples, occupy the same room for sleeping purposes.

‡ More than two persons per room. Both living and sleeping rooms are included in the total number of rooms, and all children are counted as adults.

165 families with a total of 634 persons. Outside the scheduled areas there are 56 individual houses which are unfit for human habitation, containing 59 families consisting of 192 persons. It will be seen, therefore, that the total numbers of families and persons to be displaced are 224 and 826 respectively.

The number of houses repaired under Section 17 of the Act was 591, and, of these, 562 were dealt with by informal notices, 25 by formal notices and 4 by the City Council in default of owners.

Corporation Housing Estates.—The following table contains particulars of the work carried out by the Department in connection with the Corporation housing estates each year since 1930:—

Year	Vacant Houses inspected	Vacant Houses found to be verminous	Percentage found verminous	Houses reported verminous by City Treasurer and Controller's Dept.	Investigations into home conditions of applicants	Miscellaneous inspections
1930	321	98	30·5	95	344	53
1931	347	93	26·8	40	312	42
1932	419	91	21·7	41	411	65
1933	435	89	20·5	75	367	196

It will be noted that the control exercised by the Department has resulted in a progressive reduction in the proportion of vacant houses found to be verminous.

Houses-Let-in-Lodgings.—Mainly owing to stress of work involved in the slum clearance scheme, it has not been possible to continue the activities of the Department in connection with houses-let-in-lodgings which were referred to in the report for 1932.

XVII.—FOOD INSPECTION.

Meat Inspection at Municipal Abattoirs.—The following tables set out in detail the work done in connection with meat inspection during the year.

Animals slaughtered and whole carcasses found diseased which were surrendered and destroyed or otherwise dealt with by arrangement with the owners:—

	ROATH ABATTOIR		CANTON ABATTOIR		TOTALS	
	Slaughtered	Diseased or unsound and destroyed	Slaughtered	Diseased or unsound and destroyed	Slaughtered	Diseased or unsound and destroyed
Bulls	60	3	26	1	86	4
Cows	378	26	271	30	649	56
Heifers	2,185	10	532	5	2,717	15
Steers	1,353	3	332	3	1,685	6
Calves	7,106	29	927	8	8,033	37
Sheep and Lambs	32,718	48	18,634	80	51,352	128
Pigs	21,837	124	6,965	62	28,802	186
Totals	65,637	243	27,687	189	93,324	432

Instances in which tuberculosis was found:—

	ROATH ABATTOIR		CANTON ABATTOIR		TOTALS	
	Number	Percentage	Number	Percentage	Number	Percentage
Cattle:—						
Bulls	17	28·33	3	11·51	20	23·25
Cows	145	38·36	112	41·33	257	39·60
Heifers	87	3·98	27	5·07	114	4·19
Steers	47	3·47	11	3·31	58	3·44
Calves	24	0·34	4	0·43	28	0·35
All Cattle	320	2·88	157	7·51	477	3·62
Pigs	274	1·25	194	2·78	468	1·62

Causes of destruction of carcasses:—

Cause	Beef	Veal	Mutton and Lamb	Pork	Totals
Tuberculosis	75	20	...	160	255
Dropsy ... ..	...	...	38	1	39
Emaciation ... ..	...	1	11	...	12
Dropsy and Emaciation	1	...	57	...	58
Johne's Disease	3	...	...	...	3
Moribund ... ..	...	...	4	1	5
Found dead ... ..	...	...	...	...	...
Decomposition ... ..	...	...	...	...	...
Other Causes	2	16	18	24	60
Totals	81	37	128	186	432

Approximate weight of diseased or unsound meat surrendered and destroyed or otherwise dealt with by arrangement with the owners:—

Carcases of—				Tons	cwt.	lb.
Beef	...	...	...	22	1	48
Veal	...	...	...	1	7	35
Mutton and lamb	...	...	...	2	4	13
Pork	...	...	...	7	17	111
Part carcases of—						
Beef	...	...	...	1	10	17
Veal	...	...	...	—	—	20
Mutton and lamb	...	...	...	—	1	3
Pork	...	...	...	1	3	43
Offal of—						
Beasts	...	...	...	16	19	111
Calves	...	...	...	—	8	56
Sheep and lambs	...	...	...	5	5	68
Pigs	...	...	...	3	4	11
Total	...	...	...	62	3	88

Meat Inspection at Private Slaughter-houses.—The numbers of animals slaughtered were as follows:—

Sheep and lambs	...	...	...	...	314
Pigs	...	...	...	...	1,736
Total	...	...	...	...	2,050

Tuberculosis was found in carcasses of pork in 67 instances, the proportion being 3.86 per cent. Six unsound carcasses of pork were destroyed, the cause in each instance being tuberculosis.

The total weight of unsound meat surrendered at private slaughter-houses and destroyed by arrangement with the owners was 1 ton 3 cwt. 29 lb.

Unsound Food Exposed or Intended for Sale.—The following is a record of the work done by the sanitary inspectors in connection with inspection of food exposed or intended for sale during the year:—

	Number of Inspections.	
Butchers' shops...	...	3,292
Provision shops	...	264
Markets	...	314
Wholesale stores	...	1,448
Fish and fruit shops	...	525
Butter factories	...	124
Margarine stores (wholesale)	...	86
Ice cream premises and barrows	...	822
Fried fish shops	...	393
Food vehicles	...	81
Railway stations	...	23
Restaurants	...	257
Other premises	...	193
Total	...	7,822

Approximate weight of diseased or unsound food found in shops and stores and destroyed or disposed of by the owners otherwise than as food for human consumption:—

	Tons	cwt.	lb.
Beef	1	0	54
Veal	—	5	48
Mutton and lamb	—	4	94
Pork	—	11	0
Offal	—	5	80
Fish	—	10	108
Poultry	—	—	28
Rabbits	—	3	64
Ham and bacon... ..	—	5	13
Other provisions	6	18	80
Fruit	1	1	18
Vegetables	13	6	42
Grain	6	0	0
Total	30	13	69

Meat Hawkers.—Eighteen certificates for one year were granted under Section 108 of the Cardiff Corporation Act, 1930, to persons not keeping butchers' shops in the city, who desired to sell meat or meat products from vehicles, baskets or barrows, after the approval of the storage accommodation provided.

Milk Inspection.—The following is a statement showing the distribution of the milk business in Cardiff and the amount of milk sold per day in June, 1933:—

Character of Business	Number of Vendors	
	Totals	Selling 6 gallons or less per day
(1) From retail premises other than shops, with or without rounds	53	6
(2) By rounds direct from farms within the city boundary	18	—
(3) By rounds direct from farms or premises beyond the city boundary	129	10
(4) From shops (not entirely bottled milk) with or without rounds	89	63
(5) From shops (bottled milk only)	367	366
(6) By rounds only	145	14
Totals	801	459

The approximate number of gallons of milk sold per day by all vendors was 11,735, an increase of 690 gallons over the quantity sold per day in June, 1932. Included in the total quantity sold per day in June, 1933, were 3 gallons of Certified milk, 577 gallons of Grade A (T.T.) milk, and 13 gallons of Grade A milk.

Veterinary Inspection of Cows.—The Veterinary Officer usually examines all cows on dairy farms within the city monthly. The following information is compiled from the reports which he submitted:—

Month	Dairymen whose Premises were visited	Visits	Cows in Milk		Cows excluded from Dairy Herds	Cows not in Milk	
			Examined	Found diseased		Examined	Found diseased
January	26	26	317	1	1	74	—
February	26	26	331	1	1	71	—
March...	26	27	360	9	3	84	—
April ...	26	27	390	20	4	79	—
May ...	26	30	360	21	4	77	—
June ...	26	29	358	25	4	81	—
July	26	31	356	17	2	96	—
September	28	35	369	22	4	92	—
October	28	37	375	23	8	96	—
November	28	35	398	20	5	98	—
December	29	37	403	30	3	68	—

Fourteen cows affected with tuberculosis were slaughtered during 1933 in terms of the Tuberculosis Order, 1925.

The Veterinary Officer occasionally accompanies the officers of other local authorities when examining cows at farms situated outside Cardiff from which milk sold in Cardiff is found to contain tubercle bacilli. During 1933 he made 8 such visits and examined 169 cows in milk and 28 cows not in milk. Of the 169 cows in milk examined, 15 were found to be diseased, but none was excluded from dairy herds as the result of clinical examination.

Tubercle Bacilli in Milk.—The number of routine samples of milk examined for the presence of tubercle bacilli was 270, of which 11, or 4·1 per cent., were found to be positive. The percentage of samples in which tubercle bacilli were found during the ten years 1923-32 was 4·17. The milk was produced outside Cardiff in 9 of the cases in which tubercle bacilli were found during 1933, and the action prescribed under Section 4 of the Milk and Dairies (Consolidation) Act, 1915, was taken in each case.

Routine Bacteriological Examination of Milk.—The following is a record of the bacteriological examination of ordinary commercial milk carried out during 1933, the results being shown in such a way as to reveal the proportion which attained the standard prescribed by the Milk (Special Designations) Order, 1923, for Grade A milk:—

Period	Number of Samples examined	Number containing not more than 200,000 bacteria in 1 c.c.	Number with <i>B. Coli</i> absent in 1/100 c.c.	Number attaining Grade A standard by both tests	Percentage attaining Grade A standard
January—May ...	113	102	103	98	87
June—August ...	73	53	53	43	59
September—December ...	94	82	72	65	69
Totals ...	280	237	228	206	74

Graded Milks.—The following is a statement of the number of licences for the various grades of milk and the number of individual dealers under the Milk (Special Designations) Order, 1923, each year since 1923:—

Description	Number on 31st December											
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	
(1) Producers' licences to use the designation "Grade A" ...	...	1	1	1	1	1	1	1	4	2	2
(2) Dealers' licences to use the designation "Certified" ...	...	...	...	2	...	2	2	4	2	2	2
(3) Dealers' licences to use the designation "Grade A (Tuberculin Tested)"—												
(a) Bottling establishments ...	...	...	...	3	5	17	21	24	24	23	22
(b) Shops ...	...	...	...	...	...	17	25	26	25	28	31
(c) Supplementary ...	...	...	...	...	1	1	1	1	1	6	8
(4) Dealers' licences to use the designation "Grade A"—												
(a) Bottling establishments ...	3	3	6	6	9	2	2	...	3	3	2	
(b) Shops ...	...	...	...	2	8	2	...	...	...	...	2
(c) Supplementary ...	...	2	2	2	1	1	3	3	3	3	2
(5) Dealers' licences to use the designation "Pasteurised"												
(a) Pasteurising establishments ...	1	1	1	...	...	...	...	...	...	2	2
(b) Shops ...	...	...	...	...	...	...	...	...	...	...	13
(6) Individual dealers—												
(a) Licensed to use the designation "Certified" ...	...	...	...	2	...	2	2	4	2	2	2
(b) Licensed to use the designation "Grade A (Tuberculin Tested)" ...	...	...	...	3	6	35	47	51	50	57	61
(c) Licensed to use the designation "Grade A" ...	3	5	8	10	18	5	5	3	6	6	6	
(d) Licensed to use the designation "Pasteurised" ...	1	1	1	...	...	...	...	...	...	2	15

The following tables show the proportion of samples of Grade A and Grade A (Tuberculin Tested) milk which conformed with the standard laid down by the Order. In every instance of a sample being below standard steps were taken to ascertain the cause and to remedy the defect.

(a) Samples from Producers' Supplies (before bottling).

Period	Number of Samples examined	Number containing not more than 200,000 bacteria in 1 c.c.	Number with <i>B. Coli</i> absent in 1/100 c.c.	Number attaining Grade A standard by both tests	Percentage attaining Grade A standard
January—May ...	18	18	18	18	100
June—August ...	37	32	34	30	81
September—December ...	11	10	11	10	91
Totals ...	66	60	63	58	88

(b) Samples from Dealers' Supplies (after bottling).

Period	Number of Samples examined	Number containing not more than 200,000 bacteria in 1 c.c.	Number with <i>B. Coli</i> absent in 1/100 c.c.	Number attaining Grade A standard by both tests	Percentage attaining Grade A standard
January—May ...	160	157	154	153	96
June—August ...	90	83	74	72	80
September—December	125	121	114	111	89
Totals ...	375	361	342	336	90

In addition, 12 samples of Certified milk and 75 samples of Pasteurised milk were examined, one of the former and eight of the latter being reported to be below the prescribed standards.

Ice Cream.—Seventy samples of ice cream were submitted for bacteriological and chemical examination, the results of which were as follows:—

Number of Bacteria per c.c.:—		Number of Samples.	
Under 100,000	32
100,000—200,000...	6
200,000—500,000...	12
500,000—1,000,000	10
Over 1,000,000	10
Presence of <i>Bacillus Coli</i> :—			
Absent in 1 c.c....	6
Present in 1 c.c.	18
„ „ 1/10 c.c.	17
„ „ 1/100 c.c.	13
„ „ 1/1,000 c.c.	10
„ „ 1/10,000 c.c.	6
Presence of <i>Bacillus Welchii</i> :—			
Absent in 10 c.c.	45
Present in 10 c.c.	16
„ „ 1 c.c.	9

Fifty-nine of the samples contained starch and 16 contained gelatine.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with food inspection:—

Acts, etc., under which Proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	With-drawn	Amount of Fines and Costs
Food and Drugs (Adulteration) Act, 1928 ...	11	7	1	2	1	...	£ s. d. 34 9 6
Milk and Dairies Acts and Order	26	24	1	1	...	...	28 9 0
Merchandise Marks Act, 1926	5	3	...	2	...	...	3 2 0
Sale of Food Order, 1921 ...	21	15	...	4	2	...	48 10 0
Totals ...	63	49	2	9	3	...	£114 10 6

Report for 1933 of Mr. S. Dixon, M.Sc., F.I.C., Public Analyst.

Food and Drugs (Adulteration) Act, 1928:—The number of samples of food and drugs submitted for analysis under the Food and Drugs (Adulteration) Act, 1928, by the Sampling Officers of the Urban Sanitary Authority during 1933 was 1,486. This total represents 6·69 samples taken for each 1,000 of the population of the city. Sixty-two, or 4·2 per cent., were returned as adulterated or not up to recognised standards.

The following table shows the number and nature of the articles examined and the number of each variety classed as adulterated:—

Description of Sample				Number Submitted	Number Adulterated
Almonds, Ground	...	...	...	4	—
Apricots, Dried	...	...	...	10	—
Arrowroot	...	...	...	4	—
Aspirin Tablets	...	...	...	4	—
Baking Powder	...	...	...	2	—
Bicarbonate of Soda	...	...	...	2	—
Bismuthated Powder	...	...	...	1	—
Boric Ointment	...	...	...	5	—
Brandy	...	...	...	1	—
Butter	...	...	...	73	—
Camphorated Oil	...	...	...	13	—
Candied Peel...	...	...	...	2	—
Cheese	...	...	...	4	—
Cheese Paste	...	...	...	2	—
Cherries, Glace	...	...	...	2	—
Cinnamon, Ground	...	...	...	6	—
Citric Acid	...	...	...	2	—
Cocoa	...	...	...	4	—
Coffee	...	...	...	14	—
Cornflour	...	...	...	6	—
Cream	...	...	...	26	—
Cream, Canned	...	...	...	1	—
Cream of Tartar	...	...	...	7	—
Currants	...	...	...	2	—
Epsom Salts	...	...	...	4	—
Fish Paste	...	...	...	2	—
Flour	...	...	...	10	—
Flour, Self-raising	...	...	...	10	—
Fruit Cordial	...	...	...	7	—
Fruits, Bottled	...	...	...	2	—
Gin	...	...	...	5	—
Ginger, Ground	...	...	...	8	—
Glauber's Salts	...	...	...	2	—
Iodine, Tincture of	...	...	...	4	1
Jam	...	...	...	11	1
Lard	...	...	...	2	—
Liquorice Powder	...	...	...	2	—
Margarine	...	...	...	30	—
Medicine, Prescribed	...	...	...	6	—
Milk	...	...	...	987	50
Milk, Skimmed	...	...	...	16	4
Milk, Condensed	...	...	...	11	—
Nectarines	...	...	...	1	—
Oatmeal	...	...	...	4	—
Pears, Dried	...	...	...	3	—
Peas, Canned	...	...	...	6	—
Pepper	...	...	...	16	—
Pepper, Cayenne	...	...	...	4	—
Prunes	...	...	...	2	—
Quinine, Ammoniated Tincture of	...	...	...	4	—
Raisins	...	...	...	9	2
Rice	...	...	...	12	—
Rice, Ground	...	...	...	14	—
Rum	...	...	...	5	—
Sago	...	...	...	1	1
Sal Volatile, Spirit of	...	...	...	3	—
Sauce	...	...	...	4	—
Sausages	...	...	...	10	—
Seidlitz Powder	...	...	...	2	—
Sultanas	...	...	...	21	—
Tea	...	...	...	14	—
Vinegar	...	...	...	25	3
Whiskey	...	...	...	7	—
Wine, Non-alcoholic	...	...	...	1	—
Zinc Ointment	...	...	...	2	—
Totals	...	...	...	1,486	62

Details of the samples classified as adulterated are as follows:—

Article	Formal or Informal	Nature of Adulteration or Irregularity
Iodine, Tincture of	Formal	Contained 2.57% of potassium iodide, being 1.07% in excess of the maximum limit of 1.5% laid down by the British Pharmacopoeia, [1932
Jam ...	Informal	Deficient of 6.5% of the minimum amount of soluble solids.
Milk (2 samples) ...	Formal	Deficient of 3% of fat.
Milk (3 samples) ...	Formal	4%
Milk ...	Informal	4%
Milk (3 samples) ...	Formal	5%
Milk (3 samples) ...	Informal	5%
Milk (4 samples) ...	Formal	6%
Milk (2 samples) ...	Informal	6%
Milk ...	Formal	8%
Milk ...	Formal	9%
Milk ...	Informal	9%
Milk ...	Formal	10%
Milk ...	Formal	11%
Milk (2 samples) ...	Formal	12%
Milk ...	Formal	13%
Milk (2 samples) ...	Informal	14%
Milk ...	Formal	15%
Milk ...	Informal	16%
Milk ...	Formal	18%
Milk ...	Formal	20%
Milk ...	Formal	22%
Milk ...	Formal	25%
Milk ...	Informal	30%
Milk ...	Formal	Deficient of 1% of non-fatty solids.
Milk ...	Formal	F.P. = -0.524°C. = approximately 3% of added water.
Milk ...	Formal	Deficient of 2% of non-fatty solids.
Milk ...	Formal	F.P. = -0.499°C. = approximately 7% of added water.
Milk ...	Informal	Deficient of 2% of non-fatty solids.
Milk ...	Formal	F.P. = -0.511°C. = approximately 5% of added water.
Milk ...	Formal	Deficient of 2½% of non-fatty solids.
Milk ...	Formal	F.P. = -0.509°C. = approximately 6% of added water.
Milk ...	Formal	Deficient of 2½% of non-fatty solids.
Milk ...	Formal	F.P. = -0.508°C. = approximately 6% of added water.
Milk ...	Formal	Deficient of 3% of non-fatty solids.
Milk ...	Formal	F.P. = -0.517°C. = approximately 4% of added water.
Milk ...	Formal	Deficient of 3% of non-fatty solids.
Milk ...	Formal	F.P. = -0.504°C. = approximately 6% of added water.
Milk ...	Formal	Deficient of 3½% of non-fatty solids.
Milk ...	Formal	F.P. = -0.511°C. = approximately 5% of added water.
Milk ...	Formal	Deficient of 4% of non-fatty solids.
Milk ...	Formal	F.P. = -0.523°C. = approximately 3% of added water.
Milk ...	Formal	Deficient of 7% of non-fatty solids.
Milk ...	Formal	F.P. = -0.485°C. = approximately 10% of added water.
Milk ...	Formal	Deficient of 7% of non-fatty solids.
Milk ...	Formal	F.P. = -0.483°C. = approximately 10% of added water.
Milk ...	Formal	Deficient of 8% of non-fatty solids.
Milk ...	Formal	F.P. = -0.484°C. = approximately 10% of added water.
Milk ...	Formal	Deficient of 8% of non-fatty solids.
Milk ...	Formal	F.P. = -0.483°C. = approximately 10% of added water.
Milk ...	Informal	Deficient of 1% of fat and 1½% of non-fatty solids.
Milk ...	Formal	F.P. = -0.509°C. = approximately 6% of added water.
Milk ...	Formal	Deficient of 14% of fat and 13% of non-fatty solids.
Milk ...	Formal	F.P. = -0.455°C. = approximately 16% of added water.
Milk, Skimmed ...	Formal	Deficient of 2½% of non-fatty solids.
Milk, Skimmed ...	Formal	F.P. = -0.511°C. = approximately 5% of added water.
Milk, Skimmed ...	Formal	Deficient of 3% of non-fatty solids.
Milk, Skimmed ...	Formal	F.P. = -0.510°C. = approximately 5% of added water.
Milk, Skimmed ...	Formal	Deficient of 3% of non-fatty solids.
Milk, Skimmed ...	Formal	F.P. = -0.505°C. = approximately 6% of added water.
Milk, Skimmed ...	Formal	Deficient of 14% of non-fatty solids.
Milk, Skimmed ...	Formal	F.P. = -0.445°C. = approximately 17% of added water.
Raisins ...	Formal	Contained an excess of 300 parts per million of sulphur dioxide.
Raisins ...	Formal	Contained an excess of 400 parts per million of sulphur dioxide
Sago ...	Formal	Consisted of tapioca.
Vinegar ...	Formal	Deficient in acetic acid to the extent of 4 per cent.
Vinegar ...	Formal	Deficient in acetic acid to the extent of 7 per cent.
Vinegar ...	Formal	Deficient in acetic acid to the extent of 15 per cent.

F.P. = Freezing point.

Milk.—The Sale of Milk Regulations, 1901, require, in effect, that milk shall be sold in the same condition in which it was given by the cows, whatever may be its composition, although according to these regulations any milk falling below the limits of 3.0 per cent. of fat and/or 8.5 per cent. of non-fatty solids may be described as adulterated without any further evidence, and the onus of proof that such milk has not been interfered with is placed on the vendor. In order to prevent any possible miscarriage of justice (e.g., through the incompetence of a witness), it is obviously undesirable that the vendor of a sample of milk which is naturally of poor quality and has not been adulterated should be required to attend the court to prove his innocence, and an account was given in the annual report for 1932 (pages 66-68) of the methods adopted in Cardiff to distinguish between such milk and milk which has been deliberately adulterated or carelessly handled. These methods have been used throughout the year, and unless there are exceptional circumstances, prosecutions are only instituted when there is such a difference between the analytical results given by a formal sample and the corresponding appeal-to-cow sample that no explanation can be found other than adulteration, or, in some cases of fat deficiency, careless handling (e.g., failure to keep the milk properly mixed).

Samples of milk have been taken regularly from ordinary retail vendors in the highways, from shops and upon delivery at the various public institutions. Five hundred and forty samples were taken formally (i.e., in accordance with the procedure laid down in Section 18 of the Act) and 447 were informal samples. Practically all the informal samples were "graded" milks taken primarily for bacteriological examination, and when any of these were found to be below the presumptive limits of the Sale of Milk Regulations, formal samples were procured on the following day. It is very satisfactory to note that only one of these graded milks yielded any evidence of containing extraneous water, and although several were considerably deficient in fat, this can be largely accounted for by the method of production laid down and in some cases the appeal-to-cow samples were also low in fat. The analysis of these informal samples of graded milk is also of value, inasmuch as the results furnish the Public Health Department with information as to the chemical composition of specially designated milk compared with the ordinary supply. It will be seen from the following table that on the average the graded milks were of somewhat better quality than the ordinary samples examined. Very similar results were obtained in 1932.

Average Composition of Graded Milk and Ordinary Milk, 1932 and 1933.

Designation	Number of Samples	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
Graded Milk (1933) ..	465	3.79	8.80	12.59
Ordinary Milk (1933) ..	552	3.65	8.76	12.41
Graded Milk (1932) ...	270	3.78	8.87	12.65
Ordinary Milk (1932) ...	527	3.68	8.79	12.47

The two following tables show the average composition of all the milk examined during 1933 and during the years 1929-1933.

Average Composition of all Milk Samples, 1933.

Month	Number of Samples	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
January	79	3.70	8.72	12.42
February	84	3.77	8.73	12.50
March	90	3.69	8.71	12.40
April	86	3.54	8.73	12.27
May	92	3.50	8.79	12.29
June	78	3.55	8.82	12.37
July	82	3.62	8.74	12.36
August	72	3.69	8.69	12.38
September	96	3.88	8.76	12.64
October	90	3.99	8.86	12.85
November	79	3.90	8.89	12.79
December	59	3.82	8.88	12.70
Whole year	987	3.72	8.78	12.50

Average Composition of all Milk Samples, 1929-1933.

Year	Number of Samples	Fat per cent.	Non-fatty Solids per cent.	Total Solids per cent.
1929	487	3.71	8.87	12.58
1930	519	3.69	8.90	12.59
1931	600	3.79	8.78	12.57
1932	797	3.72	8.81	12.53
1933	987	3.72	8.78	12.50
1929-1933	3,390	3.73	8.82	12.55

Further experience with the Hortvet cryoscope has strengthened the view that the freezing point test for detecting and estimating the amount of added water in milk is of the greatest value. It is obviously necessary to accumulate the results of as many authentic samples as possible, and therefore, in addition to the work on the composition and freezing point of milk from cows at the City Mental Hospital Farm, Whichurch, recorded last year, the freezing point of every appeal-to-cow sample has been determined. Since this work was commenced early in 1932, the freezing points of 19 such samples have been determined and these results are set out below, together with the corresponding non-fatty solids.

Appeal-to-Cow Samples.

No. of Sample	Non-fatty Solids per cent.	F.P. (H.) °C.	No. of Sample	Non-fatty Solids per cent.	F.P. (H.) °C.
135 (1932) ...	8.52	-0.534	518 (1933)	8.71	-0.545
894 ,, ...	8.33	-0.538	519 ,,	8.79	-0.549
895 ,, ...	8.64	-0.542	520 ,,	8.96	-0.551
69 (1933) ...	8.28	-0.546	521 ,,	8.78	-0.547
70 ,, ...	8.18	-0.534	639 ,,	8.80	-0.545
71 ,, ...	8.50	-0.544	639A ,,	8.87	-0.553
72 ,, ...	8.40	-0.540	639B ,,	8.78	-0.545
135 ,, ...	8.48	-0.545	639C ,,	8.83	-0.545
441 ,, ...	8.60	-0.542	767 ,,	8.31	-0.540
442 ,, ...	8.45	-0.540			

Average = -0.544°C.

It will be observed that although in several instances the non-fatty solids fell below the presumptive figure of 8·5 per cent., the whole of the freezing-point results fell within the normal range for unsophisticated milk ($-0\cdot530^{\circ}\text{C}.$ to $0\cdot570^{\circ}\text{C}.$).

Nineteen routine samples were found to be low in non-fatty solids, but the freezing point of each was within the known range for genuine milk, indicating that the deficiency was to be regarded as natural, and they were all returned as genuine, or at least free from added water.

In the next table are given the results of analysis of samples which, by comparison with the corresponding appeal-to-cow samples, could not be considered to be in the same condition as given by the cows and the action taken by the Public Health Department. In the case where there was a deficiency in fat, the defendant attributed this to failure to mix the milk after it had been standing for a considerable time.

Source of Milk	Result of Analysis				Observations	Action taken
	Fat percent.	Solids not Fat percent.	Ash percent.	F.P. (H.) $^{\circ}\text{C}.$		
From retailer ...	3·53	7·84	0·69	-0·485	Contained 10% of added	} Cautioned.
	3·47	7·80	0·68	-0·483	,, 10% ,, [water	
	3·52	7·83	0·69	-0·483	,, 10% ,, ,,	
From producer, in course of delivery to vendor of Nos. 120—122 ...	3·36	7·80	0·68	-0·484	,, 10% ,, ,,	} Cautioned.
Appeal-to-cow sample ...	4·01	8·48	0·75	-0·545	Of normal composition.	
From producer-retailer ...	2·56	7·37	0·68	-0·455	Contained 16% of added	} Prosecution. Fined £8 and 15/- costs.
Appeal-to-cow samples ...	3·08	8·60	0·75	-0·542	Of normal [water composition	
	3·12	8·45	0·76	-0·540		
From producer-retailer	2·67	8·77			Deficient of 11% of fat ...	} Prosecution. Paid 15/6 costs.
Appeal-to-cow sample ...	3·03	8·75			Of normal composition ...	

F.P. (H.) = Freezing point (Hortvet).

Preservatives in Food Regulations.—No preservatives were found in any of the samples of milk, cream, butter or margarine. In the table below, the various articles in which preservatives were detected and the amounts present are shown:—

Article	Number Examined	Number containing Preservative	Preservative	Parts per million	
				Amount present	Maximum permitted
Apricots, Dried ...	10	10	Sulphur Dioxide	265, 365, 370, 490, 500, 720, 850, 855, 940, 1,400,	2,000
Fruit Juices and Cordials	7	7	{ Benzoic Acid 2	480, 505	600
Jam ...	11	4	{ Sulphur Dioxide 5	35, 70, 90, 160, 170	350
Nectarines, Dried...	1	1	Sulphur Dioxide	12, 12, 20, 35	40
Pears, Dried ...	3	3	,,	930	2,000
Raisins ...	9	8	,,	465, 530, 735	2,000
			,,	160, 230, 340, 640, 690, 750, 1,050, 1,150	750
Sultanas ...	19	14	,,	25, 30, 80, 115, 120, 160, 165, 200, 215, 290, 420, 420, 460, 480	750
Wine, Non-Alcoholic...	1	1	Benzoic Acid ...	240	600

Legal Proceedings.—The following table includes all the cases in which legal proceedings have been taken in connection with the samples submitted during the year and the result of such action.

No. of Sample	Article	Result of Analysis	Result of Prosecution
410	Milk	Contained 16 per cent. of added water.	Fined £8 & 15/- costs.
454	Milk	Deficient of 15 per cent. of fat.	Paid 4/- costs.
564	Milk	" 11 " "	Paid 15/6 costs.
290	Milk, Skimmed	Contained 17 per cent. of added water.	Fined £15.
1369	Raisins	Contained an excess of 400 parts per million of sulphur dioxide.	Fined £5 & 4/- costs.
1370	Raisins	Contained an excess of 300 parts per million of sulphur dioxide.	Dismissed on warranty
387	Vinegar	Deficient of 15 per cent. acetic acid.	Fined £1.

Appropriate action was taken by the Medical Officer of Health and the Chief Sanitary Inspector in respect of other samples returned as adulterated but in which no legal proceedings were instituted.

Fertilisers and Feeding Stuffs Act, 1926.—Two fertilisers and 17 feeding stuffs were submitted for examination. These were all informal samples taken from retailers, manufacturers and farms within the city. Particulars of these articles are as follows:—

Article	Number examined	Number unsatisfactory	Observations
Barley Meal ...	4	...	Guarantee:—Phosphoric Acid, P_2O_5 = 14·65%. Present:—13·15%.
Basic Slag ...	1	1	
Brewers' Grains, Dried ...	1	...	
Compound Cake ...	1	...	
Compound Meal ...	2	...	
Compound Fertiliser ...	1	...	
Fish Meal ...	1	...	
Maize Flakes ...	1	...	
Middlings ...	1	...	
Oats, Sussex Ground ...	3	...	
Sharps ...	3	...	
Totals ...	19	1	

The statutory statement given with the basic slag was irregular and did not state the "fineness" of the article. The percentage of phosphoric acid, P_2O_5 , was 1·5 per cent. low, being outside the limit of variation of 1 per cent. allowed.

Rag Flock Acts, 1911 and 1928.—Eleven samples of rag flock obtained from upholsterers were submitted under the Rag Flock Acts and all were found to conform to the standard of cleanliness laid down by the Rag Flock Regulations.

Imported Food.—In addition to the samples of food and drugs analysed for the Urban Sanitary Authority, 32 samples of imported food were examined for the Port Sanitary Authority. These comprised the following articles:—

Apples, Dried	...	...	1
Apricots, Dried	...	...	1
Fruit Juice ...	...	...	2
Fruit Pulp ...	...	...	2
Milk, Dried	...	...	1
Raisins	...	...	22
Sultanas	...	...	3

Ten samples of raisins, all from Spain, contained sulphur dioxide in excess of the maximum limit of 750 parts per million. The amounts present in these varied from 850 to 1,750 parts per million, and six large consignments were re-exported under instructions from the Medical Officer of Health. This work is therefore very useful in preventing the distribution of adulterated or contaminated foodstuffs, for in the last two or three years not only have raisins containing excessive amounts of preservative been stopped at the Port, but rice found to be contaminated with arsenic and oats containing barytes have been destroyed.

Miscellaneous Samples.—For the Public Health Department—20. These consisted of milk (6), bread (5), soap powder (2), unwashed rag flock (2), acriflavine solution, an alcoholic fluid, coal, honey and stout.

The soap powders had the following composition:—

				No. 1	No. 2
				Percentage	Percentage.
Water	...	...	...	20·0	14·7
Sodium Carbonate, Na ₂ CO ₃	...	...	...	63·9	68·0
Soap	...	...	...	16·1	17·3
				<hr/> 100·0 <hr/>	<hr/> 100·0 <hr/>

It was alleged that this powder caused dermatitis after use. The samples contained no free alkali hydroxide, but the sodium carbonate present may well have proved irritating to a sensitive skin.

For the Public Assistance Committee—6. These consisted of compound syrup of figs and 3 calomel powders from the Outdoor Dispensary, a calomel powder from one of the District Medical Officers, and a sample of baking powder. The baking powder was very deficient in the active ingredients and yielded only 2·2 per cent. of available (and total) carbon dioxide.

For the Public Works Department.—Four samples of mortar. Two of these proved to be of unsatisfactory quality, being very deficient in lime.

For the City Police—11. Nine articles were examined in connection with two cases of safe-breaking. Each of two samples believed to be alcoholic wine, taken in connection with a case of alleged selling of alcoholic liquor on unlicensed premises, were found to contain 28·6 per cent. of proof spirit.

For the City Coroner—9. Seven specimens of the viscera of a child and one each of sweets and biscuits were found to be free from arsenic and other irritant metallic salts.

For the City Treasurer and Controller's Department—A duplicating fluid has been made up for this department on six occasions during the year, its composition being based upon the sample submitted for analysis in 1932.

For the South Wales Flock Company—21 samples of rag flock.

Summary.—The total number of samples examined during the year was therefore as follows:—

Food and Drugs for Urban Sanitary Authority	...	1,486
Imported Food for Port Sanitary Authority	...	32
Under the Fertilisers and Feeding Stuffs Act	...	19
Under the Rag Flock Acts	... ..	11
For the Public Health Department	... ..	20
For the Public Assistance Committee	... ..	6
For the Public Works Department	... ..	4
For the City Treasurer and Controller's Department		6
For the City Police	... ..	11
For the City Coroner	... ..	9
For the South Wales Flock Company	... ..	21
Total	... ..	<hr/>1,625 <hr/>

XVIII.—GENERAL SANITATION.

Statements as to the nature and extent of the work done during 1933 in connection with general sanitary inspection are given below. A summary of legal proceedings and particulars with regard to disinfection, baths at the Cleansing Station and bodies taken to the Public Mortuary are also included.

GENERAL SANITARY INSPECTION.

Complaints of nuisances received 1,715

	Inspections or Visits	Intimation Notices		Statutory Notices	
		Served	Complied	Served	Complied
House inspections for nuisances ...	3,945	2,665	2,443	319	338
" " in connection with in- fectious diseases ...	2,701	...	...	...	...
" " for vermin ...	874	157	179	...	...
" " for other conditions ...	955	...	...	...	...
Houses inspected and recorded ...	1,164	...	...	...	...
Re-inspections of houses ...	12,353	...	...	...	...
Owners and contractors interviewed ...	1,742	...	...	...	...
Knackers' yards ...	29	...	...	...	...
Slaughter-houses ...	444	...	...	...	...
Milkshops, etc. ...	2,305	20	16	...	...
Cowsheds ...	349	18	16	...	...
Offensive trades ...	96	4	4	...	...
Workshops—					
Bakehouses ...	271	44	41	...	...
Bootmakers ...	134	9	5	...	...
Dressmakers and milliners ...	66	4	2	...	...
Laundries ...	46	3	3	...	...
Tailors ...	178	15	8	...	...
Miscellaneous ...	437	28	15	...	...
Factories—					
Bakehouses ...	208	22	15	...	...
Bootmakers ...	38	1	2	...	...
Laundries ...	31	1	1	...	...
Tailors ...	13	3	...	...	...
Dressmakers and milliners ...	10	...	...	...	...
Miscellaneous ...	755	34	29	...	...
Workplaces ...	383	23	7	...	...
Tailors' outworkers ...	17	3	2	...	...
Seamen's lodging houses (day) ...	1,489	141	143	...	...
" " " (night) ...	199	...	...	...	...
Common lodging houses (day) ...	108	12	9	...	...
" " " (night) ...	4	...	...	...	...
Houses-let-in-lodgings ...	101	2	3	...	...
Tents, vans, sheds and similar structures	225	7	3	...	...
Amusement places ...	147	14	12	...	...
Public houses ...	68	9	10	...	...
Schools ...	126	4	3	...	...
Swimming baths ...	97	...	...	...	...
Water supplies ...	10	1	1	...	...
Water courses ...	68	...	...	...	...
Refuse tips ...	18	...	...	...	...
Accumulations ...	377	19	17	...	...
Sewers ...	43	4	4	...	...
Drains ...	391	113	99	...	...
Public urinals ...	155	1	...	...	...
Cesspools ...	22	2	1	...	...
Back lanes ...	280	8	6	...	...
Rat infestation ...	703	43	46	...	...
Premises where swine or other animals are kept ...	167	15	13	...	...
Marine store hawkers ...	28	...	...	...	...
Visits not classified ...	3,705	...	...	...	...

NUISANCES ABATED, REPAIRS EXECUTED, ETC.

Houses:—

Walls repaired	291
Outside plastering repaired	443
Inside plastering repaired	495
Damp-proof courses inserted	14
Floors renewed or repaired	410
Floors ventilated	82
Roofs renewed or repaired	605
Shutes, downpipes or gutters renewed or repaired	593
Chimneys repaired	160
Ceilings repaired	210
Doors and frames repaired	203
Lighting and ventilation of rooms improved	43
Window sashes or frames renewed or repaired	384
Window cords renewed	423
Staircases repaired	32
Grates or ovens repaired or renewed	199
Boilers provided or repaired	102
Food stores provided or improved... ..	27
Washhouses provided or improved	35
Out-buildings repaired	18
Obstructive out-buildings demolished	6
Walls or ceilings cleansed and redecorated	294
Bedding cleansed or destroyed	29
Rooms treated for vermin	706
Overcrowding abated	44
Yard paving relaid or repaired	446
Nuisances from animals abated	11
Accumulations removed	66
Ash-bins provided	11
Water supply provided	13
Water taps or pipes repaired	23
Water samples taken for analysis	55
Miscellaneous repairs and nuisances abated	184

Drainage:—

Drains tested (smoke)	272
„ „ (chemical)	1,093
New drains constructed	50
Drains reconstructed	357
Drains repaired	743
Drains under houses abolished	17
Drains cleansed	347
Drains cleansed or repaired by Corporation in default of owners	5
Inspection or intercepting chambers provided or repaired	73
Intercepting traps fixed	11
Soilpipes or ventilating shafts fixed or repaired	60
Rain-water pipes disconnected	3
Gullies fixed	93

NUISANCES ABATED, REPAIRS EXECUTED, ETC.—(contd).

Troughs provided	...	...	...	24
Troughs trapped or waste pipes repaired	...	...	...	133
Bath waste pipes trapped or repaired	...	...	...	17
Lavatory basins trapped or waste pipes repaired	...	...	...	24
Additional w.c.'s provided	...	...	...	44
W.c.'s reconstructed	...	...	...	381
Lighting and ventilation of w.c.'s improved	...	...	...	19
New pans and traps fixed	...	...	...	2,160
W.c. pans cleansed	...	...	...	34
Flushing apparatus provided	...	...	...	2,179
Flushing apparatus repaired	...	...	...	67
Miscellaneous repairs	...	...	...	314

Cesspools:—

Abolished and house connected to sewer	...	...	...	8
Emptied	...	...	...	8
Made watertight	...	...	...	1

Seamen's Lodging Houses:—

Limewashing or cleansing carried out	...	...	...	218
Bedding renewed	...	...	...	13
Verminous rooms treated	...	...	...	145
Bedsteads cleansed or repaired	...	...	...	413
Accumulations removed	...	...	...	5
Overcrowding abated	...	...	...	2
Washing accommodation provided	...	...	...	8
Other repairs	...	...	...	36
W.c.'s repaired	...	...	...	8

Common Lodging Houses:—

Limewashing or cleansing carried out	...	...	...	10
Bedsteads cleansed and repaired	...	...	...	1
Verminous rooms treated	...	...	...	3

Urinals:—

Additional urinals provided	...	...	...	1
Urinals reconstructed	...	...	...	1
Walls repaired or made impervious	...	...	...	2
Flushing apparatus fixed or repaired	...	...	...	1
Floors repaired	...	...	...	1
Other repairs	...	...	...	3

Earth or Pail Closets:—

Abolished	...	...	...	6
Cleansed or repaired	...	...	...	2

Tents, Vans or Sheds:—

Removed	...	...	...	22
Sanitary improvements effected	...	...	...	1

NUISANCES ABATED, REPAIRS EXECUTED, ETC.—(contd.)

Amusement Places:—

Atmospheric observations	...	...	...	26
W.c.'s repaired...	...	...	...	2
Cleanliness improved	...	...	...	6
Ventilation improved	...	...	...	5
Additional w.c. accommodation provided	...	...	...	1
Other repairs	...	...	...	2

Dairies, Cowsheds and Milkshops:—

New dairies constructed	...	...	...	8
New cowshed constructed	...	...	...	3
Existing dairies improved	...	...	...	7
Existing cowsheds improved	...	...	...	4
Drainage improved	...	...	...	8
Paving repaired	...	...	...	7
Lighting or ventilation improved	...	...	...	13
Limewashing or cleansing carried out	...	...	...	54
Water supply provided	...	...	...	1
Sterilisers fixed	...	...	...	10
Ash-bins provided	...	...	...	1
Accumulations of manure removed	...	...	...	10
Other repairs	...	...	...	13

Ice Cream Premises:—

Limewashing or cleansing carried out	...	...	...	33
Ash-bins provided	...	...	...	10
Accumulations removed	...	...	...	2
Premises improved	...	...	...	19
Other repairs	...	...	...	18
Use of unsuitable premises discontinued	...	...	...	4

Food Shops, Kitchens, etc.:—

Communicating sleeping places abolished	...	...	...	1
Accumulations removed	...	...	...	7
Cleanliness improved	...	...	...	25
Storage arrangements improved	...	...	...	5
Ash-bins provided	...	...	...	3
Other repairs	...	...	...	8
Washing-up sinks fixed	...	...	...	2
Water supply provided	...	...	...	2

Food Vehicles:—

Warnings regarding general cleanliness of vehicle, person or covering	1
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Fried Fish Shops:—

New ranges fitted	5
Ash-bins provided	6
Cleansing carried out	42
Storage accommodation provided or improved	...	...	...	4
Drainage improved	...	...	...	5
Lighting or ventilation improved	...	...	...	4
Accumulations removed	...	...	...	7
Other repairs	...	...	...	20

NUISANCES ABATED, REPAIRS EXECUTED, ETC.—(contd.)

Houses-Let-in-Lodgings:—

Limewashing or cleansing carried out	...	...	2
Other repairs	...	...	4
Overcrowding abated	...	...	1

Offensive Trades:—

Accumulations removed	...	...	2
Cleanliness improved	...	...	2
Floors or walls repaired	...	...	1
Impervious receptacles provided	...	...	1
Other repairs	...	...	1

Stables:—

Accumulations of manure removed	...	...	29
Paving repaired and renewed	...	...	3
Manure receptacles provided or repaired	3
Limewashing carried out...	5

Back Lanes:—

Accumulations removed	8
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Miscellaneous repairs or nuisances abated	7
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Water Supply.—Cardiff is provided with a supply of pure, soft water, which is gathered in reservoirs in the Taff Fawr Valley. The waterworks are owned by the Corporation and in normal conditions the supply is ample for all needs. Chemical analyses and bacteriological examinations of the water from reservoirs, filter beds and supply taps are made frequently. During the year, 113 chemical analyses and 134 bacteriological examinations were carried out, and all samples of filtered water were reported to be satisfactory.

Forty-three premises still obtain their water supply from wells or springs. These premises comprise 35 dwelling-houses, 4 farms with dwelling-houses attached and 4 dairy premises. They are supplied by 25 wells and 3 springs. The examination of the water from these sources showed that 17 wells and one spring were giving satisfactory supplies, 2 wells and 2 springs were of doubtful quality, and 6 supplies were contaminated.

Drainage and Sewerage.—It was found during recent years that the sewerage scheme was insufficient to deal with all the surface water caused by abnormally heavy rainfall. The construction of works for preventing flooding in certain parts of the city was completed during 1933, and it is now considered that the danger of flooding will be slight.

Choked and Defective Drains.—During the year the Corporation acted under Section 98 of the Cardiff Corporation Act, 1930, in 5 cases in which the owners or occupiers failed to carry out the work and no difficulty has been experienced in recovering the costs incurred.

Flushing Cisterns.—The provision of flushing cisterns to hand-flushed closets is proceeding as rapidly as possible. During the year, 2,179 cisterns were installed, making a total of 6,719 since the work was commenced in February, 1931.

Conservancy System Closets.—The numbers of closets remaining on the conservancy system at the end of the year were as follows:—

Earth closets	...	...	...	...	...	8
Privies	...	...	...	...	...	92
Total						100

As a result of action taken under Section 100 of the Cardiff Corporation Act, 1930, the number of privies in use was reduced by 6 during 1933.

Cesspools.—There are now 51 cesspools in the city receiving drainage from dwelling-houses and 4 cesspools in connection with factories.

Open-Air Swimming Baths and Roath Park Lake.—The Department has continued, in collaboration with the Parks Department, to maintain the water of the open-air swimming baths and Roath Park Lake in a satisfactory condition for bathing. The Lake was treated with copper sulphate, as usual, to prevent a recurrence of the urticarial eruption affecting the bathers, caused by cercariae in water snails. Partly owing to the dry, warm summer and also to the treatment having been carried out earlier than in previous years, it was necessary to repeat the treatment towards the end of the summer. The Parks Committee have recently stocked the Lake with trout in the hope that the fish will destroy the cercariae which cause the rash.

Rat Destruction.—The following is a summary of the work of the Department in connection with the destruction of rats:—

Amount of poisons sold	...	...	tins	161
Number of baits laid in public sewers	...	...	...	3,802
Number of baits eaten...	...	...	...	2,171
Number of baits laid elsewhere	...	...	...	20,078
Number of baits eaten...	...	...	...	10,912
Total number of baits laid	...	...	...	23,880
Total number of baits eaten	...	...	...	13,083

During the year, 1,704 live rats and 642 dead rats from premises in the city were submitted to the Department of Zoology, National Museum of Wales, for identification and for examination of their parasitic fleas, for comparison with those submitted from ships and the docks.

Factories, Workshops and Workplaces.—Details of the sanitary inspection of factories, workshops and workplaces under the Factory and Workshop Act, 1901, are given in the following tables:—

I.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

PREMISES	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries)	1,055	61	...
Workshops (including Workshop Laundries)	1,132	103	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	383	23	...
Totals	2,570	187	...

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

PARTICULARS	Number of Defects	
	Found	Remedied
Nuisances under the Public Health Acts:—		
Want of Cleanliness	161	153
Want of Ventilation	3	2
Overcrowding	1	1
Other Nuisances	24	30
Sanitary accommodation { insufficient	7	6
{ unsuitable or defective	26	30
{ not separate for sexes ... ..	...	...
Breach of special sanitary requirements for bakehouses (Sec. 97 to 100) ... ..	...	...
Totals	222	222

3.—HOME WORK.

[illegible]

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the Year	Number
Bakers...	96
Bootmakers ...	123
Dressmakers and milliners	62
Laundries ...	16
Tailors ...	143
Miscellaneous ...	322
Total Number of Workshops on Register...	762

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (Sec. 133) ...	...
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act:—	
Notified by H.M. Inspector	18
Reports (of action taken) sent to H.M. Inspector	12
Other (Notices of Occupation of Workshops received from H.M. Inspector) ...	23
Underground Bakehouses in use at the end of the year ... ..	...

Shops.—The following is a summary of the work done under the Shops Acts and in connection with the sanitary inspection of shops:—

Closing Orders in operation	15
Observations of shops under Closing Orders	706
Observations of shops as to weekly half-holidays	3,324
Inspections of shops	914
Infringements of Shops Acts	66
Notices requiring sanitary defects to be remedied:—	
Served	44
Complied	32

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with general sanitary administration:—

Acts, etc., under which Proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	With-drawn	Amount of Fines and Costs
Shops Acts	66	44	15	7	...	...	£ 17 13 6
Public Health Act, 1925 (Sec. 72)	1	1	...	...	...	...	12 6
Housing Act, 1930	3	...	...	3	...	...	7 6
Cardiff Corporation Act, 1930 (Section 101)	33	...	...	33	...	...	4 3 0
Merchant Shipping Act, 1894 (Sec. 214, Sub-sec. 5)	38	29	4	1	3	1	35 12 0
Rag Flock Act, 1911	2	1	...	...	1	...	5 0 0
Totals	143	75	19	44	4	1	£63 8 6

Disinfection.—Disinfection was carried out at 1,537 houses during the year, and 6,762 articles of bedding, clothing, etc., were removed to and disinfected at the Disinfection Station; 212 infected articles were destroyed by arrangement with or at the request of the owners.

Cleansing Station.—The total number of baths for scabies, pediculosis, etc., undertaken at the Cleansing Station was 357.

Public Mortuary.—Ninety bodies (72 males, 18 females) were taken to the Public Mortuary and 38 post-mortem examinations were performed.

XIX.—ATMOSPHERIC POLLUTION.

A byelaw made in pursuance of Section 2 of the Public Health (Smoke Abatement) Act, 1926, is in force. This byelaw prescribes that the emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes from any building other than a private dwelling house shall, until the contrary is proved, be presumed to be a nuisance. During the year, 130 observations of chimneys for smoke and/or grit were made by the sanitary inspectors and 2 intimation notices were served and complied with. Generally speaking, owners of factories willingly co-operate with the Department in the prevention of nuisances caused by smoke and it has not been found necessary on any occasion to institute legal proceedings.

Atmospheric pollution observations have been made with a deposit gauge in Cardiff continuously since January, 1926. The results of these observations made during 1933 are given in the following table:—

Month	Rain-fall (mm)	Grammes per Square Dekametre (Metric Tons per Hundred Square Kilometres)								
		Insoluble Matter			Soluble Matter		Total Solids	Included in Soluble Matter		
		Tar	Carbonaceous other than Tar	Ash	Loss on Ignition	Ash		Sulphates (SO ₃)	Chlorine (Cl)	Ammonia (NH ₃)
January ...	55	4	90	143	61	110	408	52	27	1
February ...	120	5	113	140	78	169	505	64	37	1
March ...	88	5	126	188	61	172	552	58	41	...
April ...	48	4	87	130	62	96	379	37	13	...
May ...	64	5	162	188	86	132	573	60	13	3
June ...	34	4	106	119	51	74	354	32	13	...
July ...	55	4	80	118	57	95	354	36	20	1
August ...	38	4	102	144	58	71	379	32	11	...
September ...	42	4	73	103	60	73	313	31	11	...
October ...	110	7	138	165	93	126	529	46	25	8
November ...	19	5	129	161	45	67	407	27	12	1
December ...	65	5	136	174	97	173	585	76	23	4
Total ...	738	56	1,342	1,773	809	1,358	5,338	551	246	19
Mean ...	62	5	104	148	67	113	445	46	21	2

The determination of the amount of atmospheric pollution by sulphur, as measured by the volumetric method, has been undertaken since December, 1931. Three determinations are made each month, the results for 1933 being as follows:—

Month		Sulphur Dioxide in parts per million		
		Average	Highest	Lowest
January	...	0.082	0.103	0.050
February	...	0.040	0.042	0.035
March	...	0.051	0.063	0.042
April	...	0.073	0.123	0.035
May	...	0.037	0.041	0.031
June	...	0.027	0.034	0.021
July	...	0.023	0.021	0.026
August	...	0.015	0.022	0.009
September	...	0.018	0.021	0.016
October	...	0.031	0.037	0.025
November	...	0.054	0.061	0.043
December	...	0.059	0.099	0.038

Observations of ultra-violet radiation by the acetone methylene blue method have been carried out continuously since May, 1926. The mean daily radiation units for each month during 1933 were as follows:—

Month	Mean Daily Radiation Units	
	Penylan (Suburban)	City Hall (Central)
January	0.30	0.29
February	0.36	0.34
March	0.77	0.77
April	1.10	1.13
May	1.28	1.20
June	2.18	2.10
July	2.44	2.40
August	2.45	2.39
September	1.17	1.18
October	0.44	0.43
November	0.33	0.32
December	0.21	0.20

XX.—METEOROLOGICAL OBSERVATIONS.

The Climatological Station is situated at Penylan, Cardiff, and is under the control of the Medical Officer of Health. The geographical position of the Station is Latitude 51° 30' N., Longitude 3° 10' W., and the height of the Station above mean sea level is 203 feet. Observations are made daily at 9.0 a.m. and 9.0 p.m. (G.M.T.) Summaries of the observations made during 1933 are given in the following tables:—

BAROMETRIC PRESSURE AND RELATIVE HUMIDITY.

Month	Attached Thermo- meter (Mean)	Mean Barometric Pressure*		Hygrometer*		
		Uncorrected	Reduced to Mean Sea Level and Temp. 32° F.	Dry Bulb (Mean)	Wet Bulb (Mean)	Mean Relative Humidity
	°F.	Inches.	Inches.	°F.	°F.	%
January	50	29.817	30.019	36.8	35.7	91
February	51	29.797	29.996	39.5	38.2	90
March	56	29.408	29.590	44.8	42.4	82
April	60	29.965	30.133	47.4	44.8	81
May	64	29.839	29.995	53.7	50.6	81
June	69	29.765	29.905	60.2	55.8	75
July	73	29.960	30.091	62.9	59.4	80
August	71	29.950	30.093	63.0	59.4	74
September	67	29.924	30.080	59.1	55.6	78
October	59	29.764	29.937	50.3	48.2	86
November	52	29.772	29.958	42.7	41.0	87
December	44	29.960	30.179	34.4	33.0	87
	59	29.826	29.998	49.5	47.0	83

*From observations at 9 a.m. and 9 p.m. (G.M.T.)

TEMPERATURE.

Month	Absolute Maximum	Absolute Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature	Difference from Average (44 years)
	°F.	°F.	°F.	°F.	°F.	°F.
January ...	54	23	42.3	33.4	37.8	— 2.3
February ...	55	27	44.6	35.8	40.2	+ 0.0
March ...	63	30	53.3	39.2	46.2	+ 3.8
April ...	66	32	54.9	42.0	48.6	+ 2.3
May ...	71	42	61.1	47.4	54.3	+ 1.6
June ...	82	47	68.1	53.2	60.6	+ 3.4
July ...	84	47	70.9	56.3	63.6	+ 2.9
August ...	83	47	71.9	56.2	64.1	+ 3.9
September ...	79	42	67.7	52.3	60.0	+ 3.7
October ...	64	30	56.6	45.5	51.1	+ 0.8
November ...	55	31	47.5	39.1	43.3	— 0.9
December ...	46	24	38.3	31.4	34.8	— 6.3
	84	23	56.4	44.3	50.4	+ 1.1

TERRESTRIAL RADIATION, UNDERGROUND TEMPERATURE, SOLAR RADIATION AND SUNSHINE.

Month	Temperature				Bright Sunshine	
	Grass Minimum (Mean)	Underground (Mean)		Solar Maximum (Mean)	Total Duration	Difference from Average (25 years)
		1ft.	4ft.			
	°F.	°F.	°F.	°F.	Hours	Hours
January ...	29.1	39.3	44.3	69.6	87.8	+ 35.7
February ...	31.5	38.4	38.4	82.7	96.9	+ 22.5
March ...	33.5	41.1	43.4	99.8	177.8	+ 60.3
April ...	36.2	48.4	47.2	107.7	170.4	+ 2.1
May ...	43.5	55.0	51.2	117.4	161.1	— 41.1
June ...	48.4	61.3	56.4	125.3	223.9	+ 2.4
July ...	53.0	65.2	60.0	127.2	257.2	+ 52.2
August ...	50.0	64.1	61.4	125.1	234.4	+ 50.7
September ...	46.0	59.2	60.0	111.9	175.7	+ 29.6
October ...	39.4	53.1	56.2	88.6	99.7	— 8.1
November ...	32.6	45.1	50.4	73.2	77.8	+ 10.0
December ...	26.0	37.2	44.2	56.1	48.7	— 0.7
	39.1	52.3	51.1	98.7	1,811.4*	+ 215.6

*=41% of possible duration and a daily average of 4.96 hours.

RAINFALL.

Month	Total	Difference from Average (44 years)	Greatest Fall in 24 hours*		Number of Rain-days (0·01 inch or more)	Duration
			Amount	Day		
	Inches	Inches	Inches			Hours
January ...	2·79	— 1·25	0·71	31st	15	65·25
February ...	4·45	+ 1·50	0·77	24th	17	137·75
March ...	3·73	+ 0·72	0·81	2nd	14	70·75
April ...	1·93	— 0·71	0·65	28th	6	52·50
May ...	2·46	— 0·21	0·65	2nd	13	47·00
June ...	1·96	— 0·62	0·64	22nd	11	31·50
July ...	2·19	— 0·77	0·57	8th	15	38·50
August ...	1·36	— 2·83	0·51	22nd	9	18·75
September ...	1·58	— 1·53	0·44	25th	11	40·00
October ...	4·82	— 0·07	2·13	10th	18	69·00
November ...	0·78	— 3·07	0·30	19th	7	17·75
December ...	2·18	— 2·41	1·30	1st	9	49·25
	30·23	— 11·25	2·13	10th Oct.	145	638·00

*24 hours ended 9 a.m. (G. M. T.) next day.

PORT SANITARY SERVICE.

I.—SHIPPING ENTERING THE PORT.

The following table (compiled from information kindly supplied by H.M. Collector of Customs) shows the annual number of arrivals and tonnage of vessels since 1924 :—

Year	NUMBER OF ARRIVALS			TONNAGE		
	From Foreign	Coastwise*	Totals	From Foreign	Coastwise*	Totals
1924	3,424	5,145	8,569	3,689,057	2,352,124	6,041,181
1925	3,405	4,686	8,091	3,389,249	1,920,546	5,319,795
1926	2,204	3,517	5,721	2,208,168	1,218,551	3,426,719
1927	3,451	5,847	9,298	3,593,633	3,013,405	6,607,038
1928	3,205	4,530	7,735	3,389,525	1,695,890	5,085,415
1929	3,531	4,601	8,132	3,652,185	1,891,215	5,543,400
1930	3,210	4,368	7,578	3,182,124	1,820,183	5,002,307
1931	2,433	4,271	6,704	2,467,542	1,689,505	4,157,047
1932	2,089	4,401	6,490	2,337,218	1,702,412	4,039,630
1933	1,903	4,388	6,291	2,017,207	1,778,635	3,795,842

The number and tonnage of vessels entering the port (which includes Penarth inspected by officers of the Port Sanitary Authority during 1933 are set out below :—

Ministry of Health Table A.

		Number	Tonnage	Number Inspected by		Number reported defective	Number of Vessels on which defects were remedied	Number of Vessels reported as having or having had during the voyage infectious disease on board
				Medical Officer	Sanitary Inspector			
From Foreign	Steamers ...	1,568	1,933,417	30	961	238	235	11
	Motor ...	125	50,955	8	71	9	9	...
	Sailing ...	183	19,258	3	127	6	6	...
	Fishing ...	27	13,577	...	9	1	1	...
Total Foreign ...		1,903	2,017,207	41	1,168	254	251	11
Coastwise	Steamers ...	1,885	1,408,768	3	708	161	161	6
	Motor ...	203	86,811	...	67	4	4	...
	Sailing ...	120	10,817	...	52	...	...	...
	Fishing ...	395	45,526	...	71	...	...	...
Total Coastwise...		2,603	1,551,922	3	898	165	165	6
Total Foreign and C'stwise		4,506	3,569,129	44	2,066	419	416	17

* Including tugboats, sand barges, pleasure steamers, etc.

The following table shows the number of vessels entering the port which were dealt with by the Department each month during 1933:—

Month	From Foreign	Coastwise	Totals
January	173	213	386
February	185	195	380
March	167	262	429
April	134	222	356
May	152	231	383
June	148	201	349
July	144	237	381
August	157	201	358
September	164	198	362
October	156	220	376
November	182	228	410
December	141	195	336
Totals	1,903	2,603	4,506

The nationalities of the several types of vessels entering the port which were dealt with by the Department during 1933 are shown in the following table:—

Nationality	Steam	Motor	Sailing	Totals
American	9	...	...	9
Belgian	15	...	...	15
Brazilian	3	...	...	3
British	2,701	192	117	3,010
Danish	99	3	...	102
Dutch	26	33	...	59
Egyptian	3	...	...	3
Esthonian	50	...	...	50
Finnish	48	...	1	49
French	170	47	181	398
German	36	...	...	36
Greek	63	...	...	63
Irish Free State	112	28	4	144
Italian	56	2	...	58
Japanese	8	...	...	8
Latvian	26	...	...	26
Norwegian	188	6	...	194
Panamanian	8	...	...	8
Portuguese	22	...	...	22
Roumanian	4	...	...	4
Spanish	119	...	...	119
Swedish	87	16	...	103
Yugo-Slavonian	17	...	...	17
Miscellaneous	5	1	...	6
Totals	3,875	328	303	4,506

II.—CHARACTER OF TRADE.

Passenger Traffic.—The passenger traffic at the port is casual and small in volume and cannot be classified in the form prescribed by the Ministry of Health (*Table B*). The numbers of inward and outward passengers were 263 and 102 respectively, all of whom travelled by cargo vessels.

Cargo Traffic.—The principal imports are iron ore, pitwood, fruit, potatoes, onions, grain, flour, sugar and other provisions. The principal exports are coal, coke, patent fuel and flour. Amongst the countries and places with which the port principally trades may be mentioned Spain, France, Portugal, Italy, Norway, the Baltic Ports, United States of America, Argentina, Brazil, Canada and North Africa.

The following figures as to imports and exports annually since 1924 have kindly been supplied by the Chief Docks Manager:—

Year	Imports (tons)	Exports (tons)
1924	2,141,486	11,367,604
1925	1,940,836	9,798,810
1926	2,003,654	4,358,411
1927	2,073,680	10,188,499
1928	1,730,940	8,970,143
1929	1,981,165	10,144,026
1930	1,711,970	8,963,328
1931	1,451,436	7,543,488
1932	1,185,010	6,944,230
1933	1,179,451	6,482,230

III.—WATER SUPPLY.

The water supply for the port and shipping is derived entirely from the Cardiff Corporation supply by means of hydrants installed at convenient points.

During the year, 106 samples of drinking water from ships were submitted to the Cardiff and County Public Health Laboratory for bacteriological examination, the results being as follows:—

Satisfactory	...	...	...	86
Moderate purity	...	...	...	16
Doubtful purity	...	...	...	1
Contaminated	...	...	...	3
Total				106

Notices were served on the masters of the vessels having contaminated water or water of doubtful purity on board, and in each instance the tanks were emptied, cleansed and refilled at this port.

IV.—PORT SANITARY REGULATIONS, 1933.

Operation of the Regulations.—The Port Sanitary Regulations, 1933, made by the Minister of Health, came into operation on 1st May, 1933. The new Regulations replaced the Cholera, Yellow Fever and Plague Regulations, 1907, the Port Sanitary Authorities' (Infectious Diseases) Regulations, 1920, and the Public Health (Deratisation of Ships) Regulations, 1929. They include provisions for carrying out obligations assumed by the Government under the International Sanitary Convention of Paris, 1926, for preventing the access of rats to ships and for the control of persons embarking in outward bound ships who are suffering from infectious disease or who have been in such relations with persons so suffering as to render them liable to transmit the disease.

The following are important definitions contained in the Regulations:—

"Foreign-going ship" means a ship employed in trading or going between a port in Great Britain and Northern Ireland and some port or place situated beyond the following limits:—The coasts of Great Britain and Ireland, the Channel Islands, the Isle of Man, or the continent of Europe between the River Elbe and Brest inclusive.

"Foreign Port" means a port or place situated elsewhere than in Great Britain, Ireland, the Channel Islands, or the Isle of Man.

“Approved Port” means a port in which the Port Medical Officer is authorised by the Minister to grant deratisation certificates and deratisation exemption certificates.

“Infected” and “suspected” in relation to ships arriving in a port refer to cases of cholera, plague, yellow fever, or rodent plague.

“Infectious Disease” means any epidemic or acute infectious disease, but does not include venereal disease.

The master of a foreign-going ship approaching a port from a foreign port is required to ascertain the state of health of all persons on board.

The master of a foreign-going ship arriving in a port in Great Britain and Northern Ireland from a foreign port is required to fill in and sign a Declaration of Health on the prescribed form. The master has to deliver the Declaration of Health to the Customs Officer or the Officer of the Port Sanitary Authority, whichever first boards the ship.

If the answer to any of the questions in the Declaration of Health is “yes,” free pratique will not be granted until the ship has been visited by the Port Medical Officer.

When a ship is “infected” or “suspected” or has a case of typhus fever or small-pox on board, the master is required to cause the ship to be taken direct to a mooring station unless the Port Medical Officer gives him special instructions.

Arrangements have been made by the Cardiff Port Sanitary Authority with the Cardiff Pilotage Authority whereby pilots of foreign-going ships hand to the masters of such ships forms of Declaration of Health with instructions for them to be filled in prior to arrival.

All foreign-going ships arriving from foreign ports during the day or night (other than those arriving at Penarth Dock) are boarded immediately on arrival by an officer of the Port Sanitary Authority, who collects the Declarations of Health and, if satisfied that there is no disease on board, issues an “all clear” certificate to a Customs Officer in order that free pratique may be granted. If there is a case of illness, the ship is immediately boarded by a medical officer. At Penarth Dock, by arrangement with H.M. Collector of Customs and Excise, the Declarations of Health are collected by a Customs Officer, who hands them to an officer of the Port Sanitary Authority daily. In the event of a ship arriving at Penarth Dock with illness on board, the Customs Officer immediately notifies officers of the Authority by telephone.

Arrangements have been made for wireless messages received from masters of ships requiring the attention of the Port Medical Officer to be transmitted to the Authority during the day or night. Warning messages are sometimes received from Lloyd’s Signal Station at Barry Island. Pilots, Customs Officers and shipping agents have willingly agreed immediately to inform officers of the Port Sanitary Authority of any matter likely to require special attention under the Regulations.

One of the berths at the North West corner of Queen Alexandra Dock has been designated as a mooring station within the docks and a position situate in the Bristol Channel, near Flat Holm Island, has been designated as a mooring station outside the docks.

The following classes of vessels are exempt from detention in terms of Article 14 (1) of the Regulations, unless specific instructions to the contrary are given in respect of any particular vessel, viz.:—

(a) All vessels referred to in Article 14 (1) (a) (on which a death from, or a case of, infectious disease has occurred within the last six weeks) unless such disease is known, or suspected, to have been cholera, plague, yellow fever, typhus, or smallpox, and

(b) All vessels arriving from ports included in the list of infected ports or seaboard (referred to in Article 11 and Article 14 (1) (b)) unless they are carrying cargoes of grain or unless there has been during the voyage sickness or death among the crew or passengers, or unusual mortality among rats.

No difficulty has been experienced in carrying out the provisions of Article 16. The boarding of ships arriving from foreign ports by unauthorised persons has been

discontinued, and suitably printed post-cards are supplied to persons permitted to land, to enable them to forward particulars of their addresses to the Port Medical Officer if they go to an address other than that stated on disembarkation.

Accommodation is provided at the Port Sanitary Offices for the purpose of medical examinations.

Cleansing and disinfection of ships are done under the supervision of officers of the Authority. The cleansing of persons is carried out at the Cleansing Station belonging to the Cardiff City Council, and bedding, clothing and effects are disinfected at the City Council's Disinfecting Station.

Ample temporary accommodation is provided at several seamen's institutes for persons requiring such accommodation for the purposes of the Regulations.

Sixteen beds are provided at Flat Holm Hospital for cases of plague, cholera, or yellow fever; this hospital is situated on an island in the middle of the Bristol Channel. Accommodation is provided for cases of smallpox at the Cardiff Smallpox Hospital and for cases of other infectious diseases at the Cardiff Isolation Hospital.

All necessary ambulance transport is provided by arrangement with the Cardiff City Council.

Persons who have been in contact with a case of infectious disease are carefully supervised. Those who reside in Cardiff are visited periodically by officers concerned, and should any leave Cardiff all necessary information is forwarded to the appropriate local authorities.

Examinations of rats for the detection of plague, of swabs for diphtheria, and of other specimens for the diagnosis of disease are carried out at the Cardiff and County Public Health Laboratory.

The diagnosis and treatment of venereal disease are undertaken at a treatment centre at the Royal Hamadryad Seamen's Hospital, Cardiff. Leaflets printed in various languages relating to the facilities for treatment are distributed by officers of the Port Sanitary Authority on the arrival of vessels.

Should a death occur on board a ship within or arriving at the port, the body would be removed to the Public Mortuary provided by the Cardiff City Council. Bodies of persons dying from infectious disease would be removed under the supervision of officers of the Port Sanitary Authority; in other cases the bodies would be removed by the police. Arrangements would then be made with relatives, ship-owners, or shipping agents for interment.

Wireless Installations.—The results of the usual inquiries made during the year regarding the number of vessels carrying wireless installations (excluding vessels under 500 net registered tons) are shown in the following table:—

		Vessels arriving		Totals
		From Foreign	Coastwise	
With Wireless	...	759	495	1,254
Without Wireless	...	358	144	502
Totals	...	1,117	639	1,756

These inquiries have been going on since 1926, and it will be seen from the following table that there has been but little, if any, increase in the proportion of vessels with wireless installations arriving at this port:—

Year	Percentage of Vessels with Wireless Installations		
	From Foreign	Coastwise	All Arrivals
1926	67.3	52.1	63.9
1927	75.6	74.8	75.4
1928	78.6	67.0	75.4
1929	74.8	68.8	73.2
1930	69.9	72.0	70.5
1931	71.1	77.2	72.9
1932	67.1	69.2	67.8
1933	67.9	77.5	71.4

Cases of Infectious Disease landed from Vessels.—The following table shows the nature of 12 cases of notifiable infectious disease which were landed from vessels during the year :—

Ministry of Health Table C.

Disease	Number of Cases during 1933		Number of Vessels concerned	Average Number of Cases for previous 5 years
	Passengers	Crew		
Pneumonia ...	—	3	3	4.0
Malaria ...	—	8	4	9.6
Tuberculosis ...	—	1	1	9.6

These were dealt with as follows :—

Disease	Admitted to Cardiff Isolation Hospital	Admitted to Royal Hamadryad Seamen's Hospital	Allowed to return Home	Treated aboard Ship	Totals
Pneumonia ...	—	3	—	—	3
Malaria ...	—	7	—	1	8
Tuberculosis ...	—	—	1	—	1
Totals ...	—	10	1	1	12

In addition to the above-mentioned cases, one case of measles (not notifiable) was landed from a vessel and removed to the Cardiff Isolation Hospital for treatment.

Other Cases of Infectious Disease.—Nine other cases of infectious disease were dealt with by the port sanitary staff which were ascertained to fall properly within the province of urban administration, and were referred to the districts to which they belonged, as follows :—

Disease	Cardiff	Barry	Totals
Pneumonia ...	—	1	1
Tuberculosis ...	8	—	8
Totals ...	8	1	9

Cases of Infectious Disease occurring on Vessels during the Voyage but disposed of prior to Arrival.—Twenty cases of infectious disease were reported to have occurred on 9 vessels during the voyage and were disposed of prior to arrival, as follows:—

Ministry of Health Table D.

Disease	Number of Cases during 1933		Number of Vessels concerned	Average Number of Cases for previous 5 years
	Passengers	Crew		
Dysentery	—	1	1	2.8
Malaria	—	15	4	16.2
Tuberculosis	—	4	4	2.6

Cleansing and Disinfection.—Thirty-four seamen suffering from scabies were treated at the Cleansing Station, their clothing being disinfected at the Disinfecting Station, which is situated adjacently. Thirty vessels were reported as being infested with bugs, and, after inspection, notices were served requiring the masters to take all necessary steps to eradicate them. Verminous or infected beds to the number of 1,861 were destroyed.

Venereal Disease.—The following tabular statement shows the number of cases of venereal disease among seamen dealt with at the treatment centre at the Royal Hamadryad Seamen's Hospital each year since 1924:—

Year	Persons attending at the Centre for the First Time					Total Attendances	Aggregate Number of In-patient Days
	Syphilis	Soft Chancre	Gonorrhoea	Conditions other than Venereal	Totals		
1924	221	120	249	25	615	16,212	2,697
1925	200	110	291	15	616	16,008	3,104
1926	197	93	256	19	565	12,702	2,536
1927	261	86	277	16	640	13,995	2,426
1928	205	83	344	14	646	15,347	3,195
1929	239	96	348	21	704	15,027	2,093
1930	235	112	367	17	731	12,670	1,639
1931	176	84	209	18	487	9,853	1,372
1932	198	95	297	19	609	10,004	1,707
1933	194	86	255	14	549	9,918	2,220

The treatment centre forms part of the scheme of the Cardiff City Council for the diagnosis and treatment of venereal disease, and further details of the work undertaken during 1933 are contained in the report on the general health service of the city.

Sixteen cases of venereal disease came to the knowledge of officers of the Authority during the year and were recommended for treatment at the centre.

Psittacosis.—The number of parrots dealt with under the Parrots (Prohibition of Import) Regulations, 1930, with the object of preventing the introduction of psittacosis was 125.

V.—MEASURES AGAINST RODENTS.

As many rats as possible caught in ships and on quays and wharves, in warehouses, etc., and rats found dead after fumigation of ships are submitted to the Cardiff and County Public Health Laboratory for examination for the detection of plague. Unfortunately, owing to certain staff re-arrangements, the number submitted for examination during 1933 was comparatively small. Steps have now been taken, however, to increase the number of rats to be examined for plague and for classification. During 1933, 286 rats (7 caught in ships and 279 from ships after fumigation) were examined for plague, and 15 of these were submitted to the Department of Zoology of the National Museum of Wales for classification and the identification of their parasitic fleas.

To prevent the passage of rats between ships and the shore, the use of rat-guards on mooring ropes and the tarring of ropes and gangways are insisted upon and gangways are raised at night-time where possible.

The deratisation of ships is carried out by sulphur dioxide or hydrocyanic acid gas; occasionally both sulphur dioxide and hydrocyanic acid gas are used. Trapping is now very rarely used for the purpose. Details regarding the methods used and the numbers of deratisation and deratisation exemption certificates issued during 1933 are given in Table H on page 94. In addition, deratisation was carried out by trapping on three vessels, but deratisation certificates were not issued in these cases.

It is part of the routine duty of inspectors, who board all ships, to examine them carefully for rat indications. Systematic visits are paid by inspectors to quays, wharves and warehouses in the vicinity of the docks, and, when necessary, responsible owners and occupiers are advised as to the best practical means of eradicating rodents. The laying of poison baits around the docks and in adjacent premises is supervised by the inspectors. Rat poison (barium carbonate) is sold by the Department at cost price, the amount sold during the year being 13½ lbs. In all, 98,873 baits were laid in and around dock premises during the year, and approximately 4,682 rats and 2,630 mice were found dead as a result of these measures.

In most instances warehouses are reasonably rat proof, possessing concrete floors and iron doors, and the importance of rendering all buildings at the docks rat proof is constantly emphasised to owners and occupiers by the inspectors. Advice regarding the rat-proofing of ships is given whenever opportunity offers, *e.g.*, during the carrying out of repairs.

Ministry of Health Table E.

[illegible]

(b) Docks, Quays, Wharves and Warehouses.

[illegible]

Ministry of Health Table G.

MEASURES OF RAT DESTRUCTION ON PLAGUE "INFECTED" OR "SUSPECTED" VESSELS OR VESSELS FROM PLAGUE INFECTED PORTS ARRIVING IN THE PORT DURING THE YEAR.

Total Number of such Vessels arriving	Number of such Vessels fumigated by SO ₂	Number of Rats killed.	Number of such Vessels fumigated by HCN.	Number of Rats killed	Number of such Vessels on which trapping, poisoning, &c., were employed.	Number of Rats killed	Number of such Vessels on which measures of Rat destruction were not carried out.
1	2	3	4	5	6	7	8
42	2	None	2	None	1	22	37

*Ministry of Health Table H.**

DERATISATION CERTIFICATES AND DERATISATION EXEMPTION CERTIFICATES ISSUED DURING THE YEAR.

NET TONNAGE.	No. of Ships.	No. of Deratisation Certificates issued.					No. of Deratisation Exemption Certificates Issued	Total Certificates Issued
		After fumigation with			After Trapping, Poisoning, etc.	Total.		
		HCN	Sulphur	HCN and Sulphur				
1	2	3	4	5	6	7	8	9
Ships up to 300 tons ...	85	—	—	—	—	—	85	85
" from 301 tons to 1,000 tons ...	74	—	—	—	—	—	74	74
" from 1,001 tons to 3,000 tons	228	42	43	1	—	86	142	228
" from 3,001 tons to 10,000 tons	90	20	18	—	—	38	52	90
" over 10,000 tons ...	—	—	—	—	—	—	—	—
Totals ...	477	62	61	1	—	124	353	477

* Applicable only to those Ports approved by the Minister of Health for the issue of Deratisation Certificates and Deratisation Exemption Certificates in accordance with the provisions of Article 28 of the International Sanitary Convention, 1926 (Form Port II).

In consequence of the action taken internationally during recent years, there has been a considerable reduction in the number of rats infesting ships. This has led to an increase in the proportion of exemptions from fumigation granted to masters on request for inspection of ships with a view to issuing of certificates. The increase in the proportion of deratisation exemption certificates granted at this port since 1930 is shown in the following table:—

Year	Deratisation Certificates		Deratisation Exemption Certificates		Totals
	Number	Percentage	Number	Percentage	
1930 ...	236	36	420	64	656
1931 ...	195	32	407	68	602
1932 ...	121	23	411	77	532
1933 ...	124	26	353	74	477

VI.—HYGIENE OF CREWS' SPACES, ETC.

An appreciable improvement in the sanitary condition of newly constructed British vessels has been noticed, more particularly in the arrangements for lighting, ventilation, and the situation of the accommodation for seamen and firemen. In addition to the ordinary side port-lights, sky-lights have been provided, and, as these are made to open, additional lighting and ventilation are secured. Separate mess-rooms for seamen and firemen have also been provided, but no such provision has been made for apprentices, although they have separate sleeping accommodation amidships. Baths are provided, but no water supply laid on, in consequence of which the baths are not used. Water-closets of the pedestal type are provided with efficient flushing apparatus. In each of the new vessels inspected, the accommodation provided for seamen and firemen was situated in the after-part and consisted of four-berth cabins. Steam heating apparatus was provided for heating these quarters.

During the year, 4,506 vessels, with a tonnage of 3,569,129, were visited by inspectors on arrival, or as soon afterwards as practicable. The number of persons in the crews carried by these vessels was 70,760. In addition, 3,570 re-inspections of ships in dock were made. Four hundred and nineteen orders were given to masters and others in connection with nuisances and sanitary defects.

Ministry of Health Table J.

CLASSIFICATION OF NUISANCES.

Nationality of Vessel	Number inspected during the year	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British ...	1,235	1	58	313
Other Nations ...	831	—	49	160

The following table shows the number of the defects referred to in the preceding table which were remedied during the year:—

Nationality of Vessel	Defects of original construction	Structural defects through wear and tear	Dirt, vermin and other conditions prejudicial to health
British	1	55	313
Other Nations	—	43	158

VII.—FOOD INSPECTION, ETC.

Imported Foodstuffs.—The quantities of various kinds of foodstuffs imported during the year were as follows:—

Description	Tons	cwt.	Bags	Bales	Barrels	Boxes	Miscellaneous
Almonds	120	...
Apples	48,902	6,871	...
Apples, Canned	50	...
Apples, Dried	300	...
Apple Juice	634	...	...
Bacon	9,340	...	...	...
Barley, Pearl	418	...	...	...	...
Biscuits	58	114 skips
Butter	11	0	...	...	...	16,888	...
Cheese	34	0	...	...	...	28,341	...
Confectionery	40	520	60 pails
Cream, Canned	4,117	...
Fat, Edible	87	424	...
Fish, Canned	986	...
Fish, Fresh	5,951	4	...	...	...	...	...
Fish, Salted	156	...	...
Flour	25	0	39,907	...	...	...	...
Fruit, Canned	33,981	...
Fruit, Dried	50	...	...	11,077	...
Fruit, Fresh	97,875	352,997	...
Fruit Pulp	1,001	...	...
Glucose	120	...	16 drums
Hops	1	...	...	...
Ketchup	5	2,178	...
Lard	84	0	...	...	...	148,049	...
Macaroni	8,365	...
Malt	118	...	...	...	...
Margarine	719	...
Meat, Canned	11,415	...
Meat, Salted	400	...	...
Milk, Canned...	155,371	...
Milk Powder	440	...
Nuts	100	...	...	60	...
Oats, Rolled	2,614	...	...	31,198	...
Olive Oil	2	105	2 drums
Onions	14	0	114,881	...	...	64,440	...
Peas and Beans	11,140	...	...	...	...
Potatoes	286	0	33,124	...	...	70	92,179 baskets
Provisions, Canned	334	...
Rice	3,435	...	...	...	...
Sago	87	...	...	...	...
Salt	100	...	...	...	...
Sugar	3,500	0	11,088	...	...	...	...
Tomatoes, Canned	12,961	...
Tomatoes, Fresh	2,687	...
Vegetables, Canned	836	...
Vegetables, Dried	60	...	...	...
Vegetables, Fresh	17,165	...	150	450	...
Vegetables, Salted	389	...	...
Wheat	128,456	0	...	...	...	...	...
Wheat Products	9,070	...
Wine	71	...	...
Yeast	25	...

Imported Meat.—In addition to the foodstuffs referred to above, six cargoes of frozen meat were imported, the quantities being as follows:—

Quarters of beef	...	...	11,196
Pieces of beef	...	...	5,166
Beef offal (bags)	...	...	160
Carcases of mutton	...	...	16,822
Pieces of mutton	...	...	751
Carcases of lamb	...	...	67,591
Carcases of pork	...	...	5,888
Pieces of pork (bags)	...	...	45
Carcases of veal	...	...	297
Rabbits (boxes)	...	...	1,750

Public Health (Imported Food) Regulations, 1925, and Public Health (Imported Food, Amendment Regulations, 1933.—The total quantity of food withheld from human consumption during the year was 226 tons 10 cwt. 64 lb.

Ten samples were submitted to the Public Analyst for analysis under the Public Health (Imported Food) Regulations, comprising:—

Apple pulp	...	...	1
Dried apples	...	...	1
Dried apricots	...	...	1
Dried milk powder (machine skimmed)	1		
Fruit pulp	...	...	1
Grape fruit juice	...	...	1
Lemon juice	...	...	1
Raisins	...	...	3
Total	...	...	10

All of these samples were reported to be genuine or to contain preservatives within the limits laid down by the Public Health (Preservatives, etc., in Food) Regulations.

Public Health (Imported Milk) Regulations, 1926.—No fresh milk was imported during the year.

Public Health (Preservatives, etc. in Food) Regulations, 1925-27.—Twenty-two samples of food were submitted to the Public Analyst for analysis as to the presence of preservatives, comprising:—

Raisins	...	...	...	19
Sultanas	...	...	...	3
Total	...	...	...	22

Twelve of these samples were reported to be free from preservatives or to contain preservatives within the limits laid down by the Regulations, and 10 of the samples of raisins were reported to contain preservatives in excess of the prescribed limits. The consignments of raisins containing an excess of preservatives were re-exported and written guarantees were given by the consignors that the consignments would not be imported into Great Britain or Northern Ireland through any other port.

VIII.—MISCELLANEOUS.

Medical Inspection of Aliens.—The following is a summary of the work done during the year in connection with the medical inspection of aliens:—

	<i>Number inspected Total by Medical Number. Inspectors.</i>	
Aliens (excluding alien seamen) landing at the port ...	214	115
Aliens refused permission to land by Immigration Officer ...	9	—
Totals	223	115
Number of vessels carrying alien passengers ...	...	59
Number of such vessels dealt with by the Medical Inspector	...	9
Analysis of aliens landing:—		
Residents returning	...	3
In transit	...	22
Visitors	...	30
Business	...	125
Diplomatic	...	2
Contract seamen	...	31
Ministry of Labour permit	...	—
Coming to settle, not holding Ministry of Labour permits	...	1
Total	...	214

The 115 aliens referred by the Immigration Officer for detailed medical examination intended taking up employment and remaining in the country over three months.

Diseases of Animals Acts, etc.—The various Orders under the Diseases of Animals Acts with reference to the importation of animals were strictly enforced during the year. Three hundred and forty-seven dogs and 542 cats were brought to the port on vessels, and one vessel arrived direct from a scheduled country with a pig on board. All the vessels were visited regularly during their stay in port to ensure that the requirements of the Orders were observed.

Legal proceedings were taken against the master of a vessel for an infringement of the Animals (Importation) Order, 1930, a fine of £5 0s. 0d. and costs (3s. 6d.) being imposed.

During the year, 3,290 head of cattle, 4 calves, and one horse from Canada, and 1,779 head of cattle and 67 horses from Ireland, were landed at the Imported Animals Wharf.

Canal Boats.—The Chief Port Sanitary Inspector, who is also Inspector of Canal Boats, has reported that he made 32 inspections of canal boats during the year and found infringements of the Regulations made under the Canal Boats Act, 1877, regarding painting in four instances. Verbal instructions were given, and the infringements in each case were remedied. The number of boats (not propelled by motor) on the register was eight, each with accommodation for two males. The sanitary condition of the canal boats generally was satisfactory.

Full particulars of the staff engaged in connection with the school medical service were included in section I of the report for 1932. Dr. Ralph M. F. Picken resigned his appointment as School Medical Officer on 30th September, 1933, and Dr. J. Greenwood Wilson, who was appointed in his place, took up duty on 1st December, 1933. An additional assistant medical officer (part-time) was appointed and commenced duty on 2nd October, but the proportion of medical staff-time devoted to the service was not increased. These were the only changes in the staff during the year apart from a few changes in the personnel of the clerical staff.

The closest possible co-ordination continues to exist with all other health services administered by the Public Health Department and with various voluntary agencies in the city. There has been virtually no alteration in the arrangements for this co-ordination, which were fully described in section II of the report for 1930.

The arrangements for dealing with defects in the sanitary condition of school buildings discovered by medical officers and sanitary inspectors have been set out fully in previous reports and are especially referred to in section III of the report for 1932. A complete review of the hygienic conditions of the public elementary schools is being undertaken during 1934, and will be reported upon in the next annual report.

In accordance with the requirements of the Board of Education, the routine medical inspection of the following groups of children attending elementary schools was carried out :—

- All routine medical inspections are carried out at the schools, the parents of the children to be examined being notified beforehand and invited to be present. Children outside the routine age groups who are regarded by head teachers as requiring special attention are presented for inspection at the time routine inspections are taking place, although most of the special inspections are conducted at the school clinics.

The numbers of elementary school children inspected at routine medical inspections were as follows :—

					Boys	Girls	Totals
Entrants ...	...	...	...	...	1,974	1,816	3,790
Second Age Group	...	...	...	...	1,796	1,716	3,512
Third Age Group	...	...	...	...	851	1,160	2,011
Totals ...					4,621	4,692	9,313

The number of elementary school children specially inspected and the number of re-inspections undertaken were as follows:—

				Boys	Girls	Totals
Special Inspections	At School	...	...	401	447	848
	At School Clinic	...	...	2,728	3,222	5,950
Totals				3,129	3,669	6,798
Re-inspections	At School	...	...	846	874	1,720
	At School Clinic	...	...	2,588	3,077	5,665
Totals				3,434	3,951	7,385

V.—FINDINGS OF MEDICAL INSPECTION.

Details of the diseases and defects found by routine and special medical inspection are given in Table IIA, page 116. Of the 9,313 elementary school children inspected at routine inspections, 1,771, or 19·0 per cent., were found to require treatment (excluding uncleanliness and dental disease), the percentages of the three groups requiring treatment being as follows:—

Entrants	...	...	...	15·5 per cent.
Second Age Group	...	...	...	20·5 per cent.
Third Age Group	...	...	...	23·0 per cent.

There has been but little variation in the proportion of children found by routine medical inspection to require treatment during the last few years, and the proportion of the total for 1933 (19·0 per cent.) corresponded exactly to that for 1932.

Of 6,798 individual children specially inspected, 3,325, or 48·9 per cent., were found to require treatment (excluding uncleanliness and dental disease).

The number and proportion of elementary school children in whom diseases or defects were found requiring treatment or to be kept under observation are shown in the following table:—

Diseases or Defects				Diseases or Defects found at Routine Inspection		Diseases or Defects found at Special Inspection	
				Number	Percentage	Number	Percentage
Malnutrition	...	...	...	84	0·90	55	0·81
Skin diseases	...	...	...	118	1·27	1,340	19·71
Defective vision and squint	...	...	...	765	8·21	168	2·47
External eye diseases	...	...	...	104	1·12	128	1·88
Defective hearing	...	...	...	67	0·72	82	1·21
Other ear diseases	...	...	...	132	1·42	193	2·84
Chronic tonsillitis	...	...	...	402	4·32	213	3·13
Adenoids only	...	...	...	47	0·54	21	0·31
Chronic tonsillitis and adenoids	...	...	...	108	1·16	51	0·75
Other nose and throat defects	...	...	...	90	0·96	177	2·60
Enlarged cervical glands	...	...	...	36	0·39	72	1·06
Defective speech	...	...	...	27	0·29	17	0·25
Diseases of the heart and circulation	...	...	...	308	3·31	247	3·63
Non-tuberculous diseases of the lungs	...	...	...	226	2·43	304	4·47
All forms of tuberculosis (including suspects)	...	...	...	9	0·10	46	0·68
Diseases of the nervous system	...	...	...	87	0·93	132	1·94
Deformities	...	...	...	83	0·89	37	0·54
Other diseases and defects (excluding uncleanliness and dental diseases)	...	...	...	625	6·71	1,192	17·53

Average Heights and Weights.—During the course of routine medical inspection, the heights and weights of 8,853 elementary school children (4,319 boys and 4,534 girls) were taken, and the averages are shown in the following table. The results show but little variation from those found during recent years.

Age-Years	Boys			Girls		
	Number	Average Height	Average Weight	Number	Average Height	Average Weight
		in.	lb.		in.	lb.
3 ...	151	37·3	34·6	152	37·1	33·5
4 ...	671	39·6	37·5	674	39·1	36·5
5 ...	657	42·1	41·2	742	41·9	39·6
6 ...	217	44·2	45·0	202	43·8	42·9
8 ...	570	49·3	55·5	326	48·6	53·3
9 ...	1,199	50·3	58·4	1,277	50·3	57·7
12 ...	732	55·7	76·9	951	56·9	80·1
13 ...	122	57·3	80·5	210	57·7	83·5

Entrants.—Prior to the routine inspection of entrants, parents or guardians are asked to supply information on an appropriate form as to the medical history of the children. The following table has been compiled from the information received regarding 3,790 children (1,974 boys and 1,816 girls):—

Diseases	Boys		Girls		Both Sexes	
	Number	Percentage	Number	Percentage	Number	Percentage
Measles ...	1,029	52·1	1,094	60·2	2,123	56·0
Whooping cough ...	611	30·9	712	39·2	1,323	34·9
Chickenpox ...	369	18·7	384	21·1	753	19·9
Scarlet fever ...	70	3·5	67	3·7	137	3·6
Diphtheria ...	56	2·8	45	2·5	101	2·7
Rheumatism ...	12	0·6	15	0·8	27	0·7
Chorea ...	1	0·0	2	0·1	3	0·1
Tuberculosis ...	3	0·1	3	0·2	6	0·2
Bronchitis ...	103	5·2	93	5·1	196	5·2
Pneumonia ...	103	5·2	98	5·4	201	5·3
Other diseases ...	329	16·7	251	13·8	580	15·3

Of the 3,790 entrants medically inspected, 588 were found to require immediate treatment (excluding uncleanness and dental diseases) and, in addition, many diseases or defects were found which required to be kept under observation. The following table shows all the diseases or defects found in 1,655 of the entrants inspected, whether requiring treatment or to be kept under observation:—

<i>Diseases or Defects.</i>	<i>Number.</i>
Skin diseases ...	... 51
Defective vision ...	... 4
External eye diseases ...	... 124
Ear diseases... ..	... 58
Diseases of nose and throat ...	... 352
Heart diseases ...	... 109
Anaemia ... ..	... 17
Lung diseases (non-tuberculous) ...	... 121
Tuberculosis—	
Pulmonary —
Non-pulmonary ... ..	... 2
Dental diseases ... ..	... 852
Other defects and diseases ...	... 260
Total	1,950

Taking all diseases and defects into consideration, 43·7 per cent. of the entrants were found to be defective, as compared with 37·6 per cent. in 1932, and 36·7 per cent. in 1931, the increase being due mainly to the number found with defective teeth.

Re-inspection of Children found Defective.—As usual, during the course of routine inspection at schools the medical officers re-inspected children previously found to be suffering from certain diseases or defects. The number of children re-inspected in this way was 1,991, who had been found with 2,112 diseases or defects. The results of the re-inspections are given in the table below, from which it will be seen that of the 2,112 defects, 739 had not received treatment, that 1,264 had received treatment at the school clinics, and that 109 had received treatment elsewhere.

	Cured or Im- proved	No Im- prove- ment	Worse	Total Number of Defects
TREATED AT SCHOOL CLINICS:—				
Eye diseases	424	14	—	438
Ear diseases	87	27	—	114
Diseases of nose and throat	195	17	—	212
Heart diseases	25	37	—	62
Anaemia	19	3	—	22
Lung diseases (non-tuberculous)	74	6	—	80
Tuberculosis—				
Pulmonary	—	—	—	—
Non-pulmonary	—	—	—	—
Nervous diseases	14	—	—	14
Deformities	39	7	—	46
Other defects and diseases (excluding uncleanli- ness, infectious skin diseases, and dental diseases)	247	29	—	276
Totals	1,124	140	—	1,264
Percentage	88·9	11·1	—	—
TREATED ELSEWHERE:—				
Eye diseases	9	—	—	9
Ear diseases	4	2	—	6
Diseases of nose and throat	5	2	—	7
Heart diseases	1	1	—	2
Anaemia	1	—	—	1
Lung diseases (non tuberculous)	14	—	—	14
Tuberculosis—				
Pulmonary	3	—	—	3
Non-pulmonary	8	—	—	8
Nervous diseases	5	1	—	6
Deformities	10	3	—	13
Other defects and diseases (excluding uncleanli- ness, infectious skin diseases, and dental diseases)	34	6	—	40
Totals	94	15	—	109
Percentage	86·2	13·8	—	—
NOT TREATED:—				
Eye diseases	75	102	41	218
Ear diseases	5	12	—	17
Diseases of nose and throat	83	176	5	264
Heart diseases	54	33	—	87
Anaemia	—	6	—	6
Lung diseases (non-tuberculous)	26	7	—	33
Tuberculosis—				
Pulmonary	—	—	—	—
Non-pulmonary	—	—	—	—
Nervous diseases	4	2	—	6
Deformities	1	10	—	11
Other defects and diseases (excluding uncleanli- ness, infectious skin diseases, and dental diseases)	29	68	—	97
Totals	277	416	46	739
Percentage	37·5	56·3	6·2	—
Grand Totals	1,495	571	46	2,112
Percentage	70·8	27·0	2·2	—

It will be seen from the following figures for the ten years 1924-33 that gradually there has been an increase in the proportion of defects cured or improved:—

						Percentage		
						Cured or Improved	Not Improved	Worse
1924	...	...	...	...	...	55·7	43·6	0·7
1925	...	...	...	...	...	60·0	39·7	0·3
1926	...	...	...	...	...	58·9	40·4	0·7
1927	...	...	...	...	...	58·4	39·5	2·1
1928	...	...	...	...	...	60·7	36·8	2·5
1929	...	...	...	...	...	61·4	36·3	2·3
1930	...	...	...	...	...	62·4	35·3	2·3
1931	...	...	...	...	...	69·2	28·9	1·8
1932	...	...	...	...	...	65·4	31·8	2·8
1933	...	...	...	...	...	70·8	27·0	2·2

VI.—“FOLLOWING UP” AND THE WORK OF SCHOOL NURSES.

In addition to the advice given to parents who are present at the inspection of their children, appropriate notices are sent directing their attention to diseases or defects discovered. Lists of such children are also sent to head teachers with a view to their co-operation in seeing that treatment is obtained. As a result of these notices many children attend the school clinics for further inspection and/or treatment or obtain treatment elsewhere without visits to their homes by school nurses. The parents of all children requiring treatment who are not seen at the clinics or otherwise ascertained to have received treatment are subsequently visited by nurses, who impress upon them the need for treatment. The following is a summary of the work of the school nurses in this connection during the year:—

Diseases or Defects					First Visits	Revisits	Totals
Defects of vision	...	...	...	...	1,012	481	1,493
Defects of teeth	...	...	...	...	782	165	947
Defects of ear, nose and throat	...	...	...	...	810	344	1,154
Other defects	...	...	...	...	2,881	911	3,792
Totals					5,485	1,901	7,386

Amongst the other work undertaken by the school nurses may be mentioned the systematic examination of children at the schools for uncleanness, attendance at the clinics in connection with medical inspection, medical treatment and dental treatment, the treatment of minor ailments under the supervision of medical officers, the following up of children who have received treatment at the clinics, and the cleansing at the Corporation Cleansing Station of children suffering from scabies.

As shown above, the total number of visits paid by the nurses to the homes of children was 7,386, and the following is a summary of other work done by them during 1933:—

Number of—

Special visits to schools	...	...	368
Examinations of children for uncleanness	...	...	51,128
Children found with vermin and/or nits	...	...	2,998
Re-examinations of children previously found unclean...	...	...	2,093
Children found to have been cleansed	...	...	711
Children suffering from scabies dealt with at the Cleansing Station	...	...	90
Number of baths given	...	...	198

VII.—ARRANGEMENTS FOR TREATMENT.

Malnutrition.—Cases of malnutrition are either referred for special inspection at the school clinics or followed up by the school nurses, and parents are advised as to suitable methods of treatment. Some of the children suffering from malnutrition are admitted to the Open-Air School (see page 112). Free meals and milk are provided in necessitous cases, and cod-liver oil and malt, cod-liver oil, and iron and ammonium citrate are sold at the clinics at cost price.

Uncleanliness.—Special attention is given by the school nurses to cases of uncleanliness (see page 103). Full printed instructions are sent to parents as to the method of destroying vermin and nits, and special nit combs are sold by the Department at cost price.

Minor Ailments and Diseases of the Skin.—The treatment of minor ailments and diseases of the skin is undertaken at the school clinics. Details of the treatment carried out during 1933 are given in the statistical tables (see page 120), from which it will be seen that 2,033 cases received treatment, as compared with 1,751 in 1932. Special attention is given to the treatment of ringworm; the number of cases treated by or under the supervision of the medical staff was 121, 18 of them being ringworm of the scalp. When necessary, cases of scalp ringworm are treated by X-rays, but during 1933 none of the cases was suitable for this form of treatment, all being treated by other methods. Arrangements have been made whereby nurses of the Queen's Institute of District Nursing render assistance in the home nursing and treatment of minor ailments, and particulars of the work undertaken by them during 1933 are shown in the following table:—

Diseases or Defects	Cases Carried over from 1932		Cases Referred for Treat- ment during 1933		Totals	
	Cases	Visits	Cases	Visits	Cases	Visits
Skin:—						
Impetigo... ..	—	—	34	596	34	596
Other skin diseases	—	—	5	101	5	101
Minor eye defects	1	49	11	196	12	245
Minor ear defects	—	—	1	15	1	15
Miscellaneous	2	9	126	1,280	128	1,289
Totals	3	58	177	2,188	180	2,246

Visual Defects and External Eye Disease.—Visual defects and external eye diseases are treated at the school clinics. In addition to a medical officer on the staff who devotes part of his time to the work, a specialist ophthalmic surgeon is engaged for two sessions weekly. Spectacles are provided through the Department at contract prices, and in necessitous cases they are provided free of charge. Particulars of the treatment of visual defects are given on page 120, from which it will be seen that 1,840 children were dealt with at the clinics, 1,563 of whom were examined for errors of refraction and 277 treated for other defects. Spectacles were prescribed for 1,373 children, and in 1,304 instances they were known to have been obtained.

The diseases and defects discovered in all the children who were dealt with at the vision clinics during the year are shown in the following table:—

Diseases or Defects	Number of Diseases or Defects		
	Boys	Girls	Totals
Squint	93	110	203
Errors of refraction—			
Hypermetropia	242	310	552
Myopia	77	78	155
Astigmatism—			
Hypermetropic	279	367	646
Myopic	97	98	195
Mixed	60	83	143
Conjunctivitis	50	76	126
Phlyctenular conjunctivitis	10	11	21
Blepharitis	54	95	149
Dacryocystitis	—	1	1
Keratitis	2	—	2
Interstitial keratitis	1	5	6
Nebulae	17	22	39
Leucoma adhaerens	1	—	1
Corneal ulcer	2	1	3
Corneal nebulae	3	—	3
Nystagmus	2	8	10
Injury to eye	6	4	10
Meibomian cyst	1	1	2
Cellulitis of eyelid	1	—	1
Trichiasis	—	1	1
Ptosis	—	1	1
Choroiditis	2	—	2
Lacrimal abscess	—	2	2
Cataract—Congenital	3	4	7
—Traumatic	—	1	1
Iritis	—	1	1
Entropium	—	1	1
Totals	1,003	1,281	2,284

Nose and Throat Defects.—Children suffering from nose or throat defects who are recommended for treatment are specially examined at the school clinics and those found to require operative treatment were, until the end of 1933, treated at a clinic where beds were provided, in order that they could be kept until the following day. The number of defects treated at the clinics was 958, of which 411 were treated by operation. Details of the treatment carried out are given on page 121.

Ear Disease and Defective Hearing.—The treatment of ear diseases is undertaken at the school clinics by or under the supervision of the medical officers, many cases of otorrhoea being treated by zinc ionisation. The number of cases treated during the year (included in the figures regarding minor ailments above) was 537.

Dental Defects.—Dental inspection and treatment are carried out by four school dentists. Children are inspected periodically at school, and the treatment is undertaken at the school clinics. Details of the work will be found on page 122. The total number of elementary school children inspected by the dentists was 24,453, of whom 18,099 were found to require treatment. Altogether 7,728 cases were treated, including 3,329 who had received treatment previously.

Orthopaedic and Postural Defects.—Special clinic facilities are provided for the examination and treatment of children suffering from orthopaedic and postural defects and arrangements have been made whereby cases requiring hospital treatment are admitted

to the Prince of Wales Hospital, Cardiff. In addition to a medical officer on the staff who deals at the school clinics with children suffering from crippling defects, a specialist orthopaedic surgeon is engaged in a consultative capacity.

The following is a summary of the work carried out at the orthopaedic clinic during 1933:—

	Children of School Age			
<i>Consultation Clinic :—</i>				
Examined for the first time	284
Recommended for treatment and/or appliances for first time	211
Recommended for further treatment and/or appliances	232
<i>Recommendations for :—</i>				
Treatment in Hospital	31
Treatment at Clinic (Special and Routine)	221
Appliances	12
Alterations to appliances	10
Special boots	18
Alterations to boots	134
Other forms of treatment	26
Treated at Clinic for first time	8
Attendances at Clinic	1,133
<i>Routine treatment (massage, electricity, exercises, etc.) :—</i>				
Treated at Clinic for first time	157
Attendances for routine treatment	4,663

The following statement relates to treatment at and provision of appliances, etc., through the Prince of Wales' Hospital, Cardiff, during 1933:—

	<i>Children of School Age.</i>				
<i>Hospital treatment:—</i>					
Admitted to Prince of Wales' Hospital—					
(a) Day cases	3
(b) Other cases	31
Under treatment at Prince of Wales' Hospital at end of 1933					
...	4
On Prince of Wales' Hospital waiting list at end of 1933—					
(a) Day cases	—
(b) Other cases	1
<i>Other treatment or provision (including appliances, etc., provided following hospital treatment):—</i>					
Appliances provided	76
Appliances altered	25
Special boots provided	6
Alterations to boots	109
Other forms of treatment provided	15

The cases examined for the first time during the year have been classified as follows:—

<i>Diseases or Defects.</i>			<i>Number.</i>
Defective posture	...	...	177
Scoliosis	...	...	8
Flat feet	...	...	27
Poliomyelitis	...	...	5
Spastic paralysis	...	...	1
Birth palsy	...	...	1
Congenital malformation or deformity	...	...	3
Torticollis	...	...	5
Knock knee	...	...	8
Claw feet	...	...	7
Tuberculous disease	...	...	1
Other defects	...	...	41
Total			284

The following is a classification of the cases discharged during the year:—

<i>Reason.</i>			<i>Number.</i>
Cured	...	...	134
Improved	...	...	69
Unlikely to benefit further	...	...	27
Left the district	...	...	12
Over school age	...	...	22
Other reasons (including trivial defects)	...	...	149
Total			413

Heart Disease and Rheumatism.—Cases of heart disease and rheumatism are dealt with at the special rheumatism clinics held in connection with the indoor treatment of cases of acute rheumatism at Lord Pontypridd Hospital (Dulwich House)—an institution under the control of the Health Committee. The number of school children under supervision at the end of 1933 was 1,467. A report on the work of the clinics and the hospital is contained in the report on the general health service (page 22).

Tuberculosis.—Cases of tuberculosis and suspected tuberculosis are referred to the Tuberculosis Institute of the Welsh National Memorial Association—the body responsible for the treatment of tuberculosis.

Other Defects and Diseases.—Many children suffering from minor defects and diseases not already mentioned are specially examined at the school clinics, where appropriate treatment is advised. Others, for the treatment of whom no special provision has been made, are followed up by school nurses, who urge upon the parents the importance of obtaining treatment.

Radiography.—The number of individual cases referred from the school clinics for radiography was 65, the total number of skiagrams taken being 116. Seventy-six parts of the body required X-ray examination in the 65 cases, as follows:—

Teeth	...	...	...	...	5
Chest	...	...	...	...	2
Spine	...	...	...	...	25
Shoulder	...	...	...	...	1
Arm	...	...	...	...	5
Wrist	...	...	...	...	1
Hand	...	...	...	...	1
Hip	...	...	...	...	18
Knee	...	...	...	...	7
Leg	...	...	...	...	2
Foot	...	...	...	...	8
Skull	...	...	...	...	1
Total					76

VIII.—INFECTIOUS DISEASES.

The section of the Department concerned with the control of infectious or communicable diseases co-operates closely with the school medical service section. Certificates regarding the exclusion from and readmission to school of children suffering from notifiable infectious diseases and of contacts are sent to head teachers and school attendance officers. The names and addresses of children who are absent from school on account of non-notifiable communicable diseases are supplied by head teachers on forms specially provided for the purpose and the homes of the cases are visited by officers of the Department.

The numbers of school children notified during the year as suffering from various communicable diseases were as follows:—

Scarlet fever	...	...	...	...	...	920
Diphtheria	...	...	...	...	...	304
Enteric fever	...	...	...	...	...	1
Pneumonia	...	...	...	...	...	52
Cerebro-spinal fever	...	...	...	...	...	2
Acute poliomyelitis	...	...	...	...	...	1
Dysentery	...	...	...	...	...	5
Erysipelas	...	...	...	...	...	3
Tuberculosis—Respiratory	...	...	...	...	...	16
„ —Other forms	...	...	...	...	...	36

The following cases of non-notifiable communicable diseases were intimated by head teachers or school attendance officers, or were otherwise ascertained:—

Chickenpox	...	...	...	...	...	361
Measles	...	...	...	...	...	1,107
Rubella	...	...	...	...	...	2
Whooping cough	...	...	...	...	...	144
Mumps	...	...	...	...	...	37

Vaccinal State of School Children.—Of 10,782 elementary and high school children inspected at routine inspection during 1933, 5,880, or 54·5 per cent., were found to be vaccinated. During the ten years 1924-33, of the children inspected, the proportion vaccinated has declined from 66·5 per cent. to 54·5 per cent., as follows:—

<i>Year.</i>				<i>Percentage Vaccinated.</i>
1924	...	...	...	66·5
1925	...	...	...	63·0
1926	...	...	...	61·6
1927	...	...	...	60·8
1928	...	...	...	60·9
1929	...	...	...	56·4
1930	...	...	...	57·4
1931	...	...	...	56·1
1932	...	...	...	58·1
1933	...	...	...	54·5

IX.—OPEN-AIR EDUCATION.

As far as possible, classes are held in school playgrounds during appropriate weather, and at several schools a special feature is made of these playground classes. During the summer months classes from other schools are taken to the public parks for lessons. Educational excursions are arranged by most of the schools to places of interest in various parts of the country. Arrangements are also made for educational visits to certain local institutions and buildings.

X.—PHYSICAL TRAINING.

There is a whole-time Organiser of Physical Education, who is responsible for the organisation and supervision of physical training in girls' and infants' schools. Special attention is given to the arrangement of organised games, such as netball and rounders, the teaching of swimming and national and folk dancing. Courses of instruction in physical education for teachers of girls' and infants' schools are held annually and are generally well attended.

There is no organiser of physical training for boys' schools, but at all schools lessons in physical exercises are given and head teachers may arrange for organised games to be held for the older children during school hours. There are several honorary organising secretaries of various games activities—football, cricket, baseball, and swimming—and many of the schools take part in league games and competitions which are arranged.

The Director of Education reports to the Education Authority annually on the work of physical education in the elementary schools.

XI.—PROVISION OF MEALS.

The number of canteens in use in various parts of the city where dinners were supplied by contract to necessitous school children was 16, and the average number of children provided with dinners daily during the year was 2,090. The following are specimen menus of the dinners supplied:—

(a) Summer.

Monday	...	Eggs or beef, potatoes, bread, rice pudding.
Tuesday	...	Fish cakes or pie, potatoes, bread, fruit and custard.
Wednesday	...	Pasties or eggs, potatoes, fruit tart.
Thursday	...	Brawn or sausage, potatoes, bread, apple or banana.
Friday	...	Fish roe or fish cakes, potatoes, bread, fruit and custard.
Monday	...	Minced meat, peas, potatoes and bread, banana or apple.
Tuesday	...	Cold beef, peas, potatoes, bread, stewed fruit.
Wednesday	...	Fish pie, potatoes, bread, fresh fruit.
Thursday	...	Brawn, potatoes, peas, bread, rice pudding.
Friday	...	Fish cakes, potatoes, bread, apple or banana.

Monday	...	Pressed beef, potatoes, bread, rice pudding.
Tuesday	...	Cold ham, potatoes, bread and butter, banana.
Wednesday	...	Fish, potatoes, bread and butter, fruit pie.
Thursday	...	Brawn, potatoes, bread and butter, apple.
Friday	...	Fish cakes, bread and butter, rice pudding.
Monday	...	Pressed beef, mashed potatoes, bread, milk pudding.
Tuesday	...	Minced meat, peas, potatoes, bread, apple.
Wednesday	...	Fish, mashed potatoes, bread, jelly and blancmange.
Thursday	...	Brawn, potatoes, bread, banana.
Friday	...	Fish cakes, bread and butter, rhubarb and custard.

(b) Winter.

Monday	...	Pea soup, bread, rice pudding.
Tuesday	...	Minced meat, beans or peas, potatoes, apple pie.
Wednesday	...	Soup, bread, milk pudding.
Thursday	...	Meat pie, potatoes, peas, jam tart or rice pudding.
Friday	...	Fish, potatoes, bread and butter, rice pudding.
Monday	...	Pea soup, bread, rice pudding.
Tuesday	...	Beef, potatoes, bread, prunes and custard.
Wednesday	...	Irish stew, bread, fruit tart.
Thursday	...	Hash, bread, milk pudding.
Friday	...	Fish or meat pie, rice pudding.
Monday	...	Pea soup, bread, rice pudding.
Tuesday	...	Meat pie, peas, potatoes, bread, fruit and custard.
Wednesday	...	Minced meat, potatoes, bread, peas, rice pudding.
Thursday	...	Pea soup, bread, suet pudding.
Friday	...	Fish cakes, potatoes, bread, fruit and custard.
Monday	...	Pea soup, bread, rice pudding.
Tuesday	...	Minced meat, beans or peas, potatoes, bread, apple pie.
Wednesday	...	Meat pie, peas, potatoes, bread, milk pudding.
Thursday	...	Pea soup, bread, suet pudding with currants, syrup or jam.
Friday	...	Meat pie, or fish pie, bread, milk pudding.

The arrangement whereby a daily ration of pasteurised milk is supplied in bottles at school instead of breakfast at canteens was continued throughout the year, the average number of children provided with free milk daily being 2,693. In addition to the children provided with milk free of charge, an average of 3,686 children were supplied with milk daily on payment of the cost by their parents. The daily ration consists of half-a-pint for children over 8 years of age and one-third of a pint for younger children.

XII.—CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

Parents.—Generally, parents show interest in and appreciation of the work of the school medical service. They are invited by notices to attend at the routine inspection of children at school and are encouraged to accompany their children to the school clinics.

Teachers.—Teachers co-operate closely in the work of routine medical and dental inspection at schools and render assistance in the preparation of the inspection schedules and the marshalling of the children for inspection. They also notify to the Department the names of children requiring special inspection and/or treatment, and of children absent from school by reason of communicable diseases.

School Attendance Officers.—The school attendance officers are helpful in every possible way. They bring to the notice of the school medical service staff many cases requiring special attention on account of absence from school through infectious and other illnesses. They also co-operate in ensuring that children of negligent parents attend the clinics when repeated notices of appointment are ignored.

Voluntary Bodies.—As mentioned on page 104, the Queen's Institute of District Nursing undertakes the nursing and treatment at home of children suffering from minor ailments who require frequent attention. Cases of child neglect amounting to cruelty are referred to inspectors of the National Society for the Prevention of Cruelty to Children who deal with them promptly, and two voluntary bodies utilise the services of the Department in the selection of delicate children for whom they provide holidays at seaside homes.

XIII.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

The numbers of blind, deaf, defective and epileptic children known to the Department are set out in detail in the return on pages 117-119. Such children are ascertained mainly during routine medical inspection and through notification by head teachers and school attendance officers.

Mentally Defective Children.—It will be seen from the return referred to that the number of mentally defective children, who were not transferable to the Mental Deficiency Authority, was 128, of whom 118 were attending the special day school and 2 were in residential institutions. The remaining 8 children are supervised at home by officers of the Department. There were also 6 children who, in addition to being mentally defective, suffered from serious physical defects; 2 of these were also in attendance at the special day school.

During the year, 64 children were specially examined or re-examined for suspected mental deficiency. Of these, 1 was regarded as normal, 2 were found to be scholastically retarded only, 31 to be dull and/or backward, 22 were certified to be feeble-minded and suitable for education in a special school, 4 were found to be neurotic and unstable, and 4 (imbeciles) were transferred to the care of the Mental Deficiency Authority. In addition to the 4 cases mentioned, 21 children who formerly attended the special day school were notified to the Mental Deficiency Authority, 8 of them (feeble-minded) being incapable of receiving further benefit from instruction there, and 13 (feeble-minded) on or before attaining the age of 16 years.

The 25 cases notified to the Mental Deficiency Authority during the year are classified, as required by the Board of Education, in the following table:—

Diagnosis	Boys	Girls	Totals
1. (i) Children incapable of receiving benefit or further benefit from instruction in a Special School :—			
(a) Idiots ... ... ...	...	...	...
(b) Imbeciles	2	2	4
(c) Others 	7	1	8
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :—			
(a) Moral Defectives ... ... ...	...	...	...
(b) Others ... ... ...	...	...	...
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16... 	4	9	13
3. Feeble-minded children notified under Article 3 of the 1928 Regulations, i.e., "special circumstances" cases ...	...	...	...
4. Children who in addition to being mentally defective were blind or deaf ... ... ... ...	...	...	...
Totals 	13	12	25

Mentally Retarded Children.—The special class for mentally retarded children was held, as usual, and at the end of the year 21 children (11 boys and 10 girls) were in attendance. The children admitted to the class cannot, at first, be regarded definitely as mentally defective. They are re-examined from time to time, some being found to have made sufficient progress to justify their return to ordinary elementary schools, while others are found to be certifiable as mentally defective and are therefore admitted to the special day school for such children.

Special Schools.—There are special day schools for mentally defective, blind (including partially blind), deaf, and physically defective children, the numbers in attendance being given in the statistical tables (pages 117-119). The children attending these schools are regularly inspected and very closely supervised by medical officers of the Department.

Greenhill Open-Air School.—The number of physically defective children on the register at the end of 1933 was 139, and the average attendance during the year—excluding August—was 112. One hundred and one children (58 boys and 43 girls) were admitted to the school, and 109 (56 boys and 53 girls) were discharged. The following are the principal diseases or defects found in the children admitted during the year:—

<i>Diseases or Defects.</i>	<i>Number.</i>
Anaemia	7
Malnutrition	26
Anaemia and malnutrition	27
Cervical adenitis	4
Quiescent tuberculosis (non-pulmonary)	11
Post-rheumatic debility	13
Post-pneumonic debility	11
Chronic blepharitis	2
Total	101

Twenty-five of these children had previously shown clinical signs suggestive of tuberculosis, but at the time of admission none of them suffered from active tuberculosis. There was a history of tuberculosis in the parents or brothers and/or sisters in 18 of the children admitted.

Thirteen of the 109 children discharged during the year were in attendance for very short periods only. The following table shows the average increases in weight and height of the remaining 96 children during the periods they attended the school:—

Average Period in School (Months)	Number of Children in Group	Average Age on Discharge (Years)	Average gain in Weight (Pounds)	Average gain in Height (Inche.)
3	6	11.75	3.42	0.08
6	5	11.65	2.93	1.10
9	15	13.52	5.05	1.60
12	7	13.57	9.63	1.93
15	9	10.83	7.75	2.50
18	14	11.91	10.54	2.30
21	7	10.46	9.82	3.00
24	11	10.39	12.14	4.68
27	8	11.59	12.53	4.09
30	12	10.48	12.85	4.56
33	1	13.50	12.75	5.50
39	1	11.25	17.00	5.50

Ninety-three children were assessed scholastically and intellectually during attendance at the school, the results being given in the following table:—

Average Period in School (Months)	Number of Children in Group	Average Age on Assessment (Years)	Average Scholastic Age (Years)	Average Mental Age (Years)	Average Intelligence Quotient (Percentage)
3	4	12.65	10.60	12.15	95.75
6	5	10.52	9.26	9.75	92.28
9	14	10.85	10.26	10.57	96.99
12	7	12.63	10.74	11.26	89.23
15	9	9.74	9.19	9.34	96.94
18	14	10.59	9.89	10.04	95.71
21	7	9.14	8.39	8.44	91.86
24	11	8.59	7.77	8.10	95.09
27	8	9.58	8.56	8.79	91.30
30	12	8.33	7.17	7.73	92.45
33	1	10.90	11.80	10.50	96.10
39	1	8.10	7.80	8.00	99.00

XIV.—FULL-TIME COURSES OF HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS.

No special courses are maintained by the Education Authority and none but blind students are receiving education at the cost of the Authority. Blind students attend courses at the Cardiff Institute for the Blind, where males are taught to make baskets, mats, cork ship fenders, brushes and coal bags, and the females are taught knitting, weaving, chair caning and light basket-making. At the end of 1933 there were 15 males and 1 female at the Institute for whom the Authority were financially responsible.

XV.—NURSERY SCHOOLS.

The question of the provision of nursery schools has been considered by the Education Authority from time to time, but none has been established.

XVI.—SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

There are 8 high schools provided by the Education Authority—4 for boys and 4 for girls—and, generally, the arrangements for medical inspection and treatment made for elementary school children are also available for high school pupils. There are also 3 secondary schools aided by the Authority—1 for boys and 2 for girls—and the managers of the school for boys and 1 of the schools for girls have requested the Authority to make arrangements for carrying out medical inspection of the pupils in attendance. All pupils at the schools where provision has been made for medical inspection are inspected on entering and prior to leaving school, and special inspections are undertaken at the school clinics when required.

The numbers of pupils inspected, the findings of inspection and a record of the treatment carried out are given in the statistical tables (pages 123-127).

XVII.—PARENTS' PAYMENTS.

The parents of both elementary school children and secondary and high school pupils are required to pay for certain treatment which is carried out at the school clinics. Application forms have to be filled in and signed by parents and, unless they are willing to pay the full cost, they are required to supply very complete information as to their

financial circumstances, which is verified when considered necessary. Payments have to be made according to an approved scale, but if the family income is below the limit prescribed, treatment is given free of charge. Most of the payments are made at the time of treatment, but in some instances the money is recovered by collectors employed by the City Council after accounts have been rendered.

XVIII.—HEALTH EDUCATION.

Copies of the Board of Education's Handbook of Suggestions on Health Education have been circulated amongst all head teachers, and every possible opportunity of gaining the interest and co-operation of teachers in health education is taken (e.g., during Health Weeks). Several thousands of copies of a popular magazine—"Better Health"—are circulated amongst the teachers and senior scholars monthly, and all children, when they leave school, are supplied with leaflets on the care of the teeth, issued by the Dental Board of the United Kingdom. The school dentists also give short talks to the children at school on the care of the teeth at the time of routine dental inspection.

XIX.—SPECIAL INQUIRIES.

No special inquiries have been undertaken by the members of the school medical staff during the year in regard to the work of the special services.

XX.—MISCELLANEOUS.

Medical Examination of Teachers.—The medical examination of newly appointed teachers and other teachers for special reasons is carried out by the medical staff. Five teachers (3 males and 2 females) were examined during the year, and appropriate reports were supplied to the Director of Education.

Juvenile Employment.—Fifteen children (10 boys and 5 girls) who had left school were medically examined at the request of the Juvenile Employment (Education) Officer and reports were sent for his guidance. Sixty-five children were also examined in connection with granting entertainment licences.

Special Classes for Speech Training.—The special classes for speech training opened at the beginning of the year with the names of 58 scholars on the register. Separate classes are now held for elementary and high school children. The number admitted during the year was 38, the total number of individual cases dealt with being 96. Forty-four children were discharged during 1933, 4 of them on account of irregular attendance, 5 having left school and 5 for other reasons. The classification on discharge of the remaining 30 cases was as follows:—

Provisionally cured	...	...	...	11
Very much improved	...	...	...	4
Much improved	...	...	...	3
Improved	...	...	...	7
Unsuitable for treatment	...	...	...	3
Unlikely to benefit further	...	...	...	2
				—
Total	...	...	...	30
				—

At the close of each term, head teachers were asked to supply reports on the progress, according to their opinions, made by children attending the classes. The following is a summary of the reports received:—

			1st Term.	2nd Term.	3rd Term.
Cured	...	...	1	4	1
Much improved	...	...	13	13	10
Improved	...	...	37	36	34
Not improved	...	...	20	18	11
No definite report	...	...	6	—	9
			—	—	—
Totals	...	...	77	71	65
			—	—	—

Head teachers also supplied reports at the end of the year on 60 scholars who had passed through the special classes and who were still attending school. These reports are summarised as follows:—

Cured	...	...	...	10
Much improved	...	...	...	11
Improved	...	...	...	23
Not improved	...	...	...	11
No definite report	...	...	...	5
Total				60

The Instructress continued to visit the schools and homes of children attending the special classes and to make after-care visits to children who had left school. She made 47 visits to schools, 77 visits to the homes of children in attendance, and 62 visits to the homes of cases who had attended the classes but had since left school. The condition of the speech of 48 of the cases to whom after-care visits were made is summarised as follows:—

Cured	...	...	...	7
Progressed or improved...	...	...	...	21
Improvement maintained	...	...	...	10
Variable	...	...	...	3
No improvement	...	...	...	2
Relapsed	...	...	...	5
Total				48

XXI.—STATISTICAL TABLES.

ELEMENTARY SCHOOLS.

TABLE I.

RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups:—

Entrants	...	...	...	3,790
Second Age Group	...	...	...	3,512
Third Age Group	...	...	...	2,011
Total				9,313

Number of other Routine Inspections ... —

B.—OTHER INSPECTIONS.

Number of Special Inspections	...	...	6,798
Number of Re-inspections	...	...	7,385
			<hr/>
Total	...		14,183

ELEMENTARY SCHOOLS.

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE				ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
				No. of Defects		No. of Defects	
				Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment
Malnutrition	...	...	...	45	39	42	13
Skin	Ringworm:	...	...	...	...	...	...
	Scalp	...	...	2	—	20	—
	Body	...	...	12	—	105	—
	Scabies	...	...	33	—	161	—
	Impetigo	...	...	35	—	785	—
Eye	Other diseases (non-tuberculous)	...	...	34	2	261	8
	Blepharitis	...	...	52	—	45	—
	Conjunctivitis	...	...	12	—	21	—
	Keratitis	...	...	1	—	4	—
	Corneal Opacities	...	...	4	—	4	—
	Defective Vision (excluding Squint)	...	...	534	116	140	6
	Squint	...	...	104	11	22	—
Ear	Other Conditions	...	...	32	3	52	2
	Defective Hearing	...	...	63	4	80	2
	Otitis Media	...	...	94	3	126	1
	Other Ear Diseases	...	...	31	4	59	7
	Chronic Tonsillitis only	...	...	171	231	150	63
Nose and Throat	Adenoids only	...	...	36	11	16	5
	Chronic Tonsillitis and Adenoids	...	...	100	8	41	10
	Other conditions	...	...	72	18	153	24
Enlarged Cervical Glands (Non-Tuberculous)	...	...	...	23	13	60	12
Defective Speech	...	...	...	19	8	12	5
Heart and Circulation	Heart Disease:	...	...	...	...	...	...
	Organic	...	...	26	67	31	73
	Functional	...	...	19	149	11	42
Lungs	Anaemia	...	...	35	12	87	3
	Bronchitis	...	...	39	40	51	25
	Other Non-Tuberculous Diseases	...	...	25	122	120	108
Tuberculosis	Pulmonary:	...	...	...	...	...	...
	Definite	...	...	—	—	—	—
	Suspected	...	...	2	2	14	13
	Non-Pulmonary:	...	...	...	...	...	...
	Glands	...	...	1	1	8	4
	Bones and Joints	...	...	—	2	6	—
Nervous System	Skin	...	...	1	—	—	—
	Other forms	...	...	—	—	—	1
	Epilepsy	...	...	3	6	12	7
	Chorea	...	...	19	10	32	7
Deformities	Other Conditions	...	...	33	16	44	30
	Rickets	...	...	1	—	—	—
	Spinal Curvature	...	...	11	—	2	—
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	Other Forms	...	...	57	14	26	9
	...	...	...	387	238	792	400

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

GROUP	NUMBER OF CHILDREN		Percentage of Children found to require Treatment
	Inspected	Found to require Treatment	
PRESCRIBED GROUPS:—			
Entrants	3,790	588	15.5
Second Age Group	3,512	721	20.5
Third Age Group	2,011	462	23.0
Total (Prescribed Groups)	9,313	1,771	19.0
Other Routine Inspections	—	—	—

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

(NO CHILD ENTERED UNDER MORE THAN ONE HEADING.)

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Mentally defective and crippled	4*
Mentally defective and blind	1†
Mentally defective and epileptic	1†
Total	6

BLIND CHILDREN.

At Certified Schools for the Blind	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
7	—	—	—	7

PARTIALLY BLIND CHILDREN.

At Certified Schools for the Blind	At Certified Schools for the Partially Blind	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	49	14	—	—	63

* Two attend the Special Day School for Mentally Defective Children; one on waiting list for residential institution; one ineducable and not attending school.

† On waiting list for residential institution.

DEAF CHILDREN.

At Certified Schools for the Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
22	—	1	—	23

PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	—	8	—	—	—

MENTALLY DEFECTIVE CHILDREN.

FEEBLEMINDED CHILDREN.

At Certified Schools for Mentally Defective Children	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
118	—	2	8	128

EPILEPTIC CHILDREN.

CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
2	—	—	6	8

PHYSICALLY DEFECTIVE CHILDREN.

A.—TUBERCULOUS CHILDREN.

I.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS.

(Including pleura and intra-thoracic glands).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
5	—	7	6	18

II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS.

(Tuberculosis of all sites other than those shown in I above).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
13	1	5	24	43

B.—DELICATE CHILDREN.

(Children—except those included in other groups—whose general health renders it desirable that they should be specially selected for admission to an open-air school).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
139	124	—	—	263

C.—CRIPPLED CHILDREN.

(Children—other than those diagnosed as tuberculous and in need of treatment for that disease—who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
4	57	1		70

D.—CHILDREN WITH HEART DISEASE.

(Children whose defect is so severe as to necessitate the provision of educational facilities other than those of the Public Elementary School).

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
20	96*	—	7	123

* Including children with definite heart manifestations who are under supervision at Rheumatism Clinics and children with congenital heart disease.

ELEMENTARY SCHOOLS.

TABLE IV.

RETURN OF DEFECTS TREATED.

TREATMENT TABLE.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Group VI.)

DEFECT OR DISEASE	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
SKIN:—			
Ringworm—Scalp	18	1	19
" —Body	102	2	104
Scabies	170	7	177
Impetigo	890	20	910
Other Skin Disease	203	16	219
MINOR EYE DEFECTS:—			
(External and other, but excluding cases falling in Group II)	27	3	30
MINOR EAR DEFECTS	537	2	539
MISCELLANEOUS (e.g., minor injuries, bruises, sores, chilblains, etc.)	86	60	146
Total	2,033	111	2,144

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

DEFECT OR DISEASE	Number of Defects dealt with			
	Under the Authority's Scheme	By Private Practitioner or at Hospital, apart from the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint) ...	1,563	1	9	1,573
Other Defect or Disease of the Eyes (excluding those recorded in Group I) ...	277	1	—	278
Total	1,840	2	9	1,851

DEFECT OR DISEASE	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint) ...	1,373	10	1,304*	10

* Including 531 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment—				
Under the Authority's Scheme, in Clinic or Hospital ...	16	6	389	—
By Private Practitioner or Hospital, apart from the Authority's Scheme	—	—	5	—
Total ...	16	6	394	—
Received other forms of treatment ...	547*			
Total number treated ...	963			

* Including 24 also treated by operation.

GROUP IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopaedic clinic	
Number of children treated ...	46	3	385	—	—	—	434

GROUP V.—Dental Defects.

(1) Number of Children who were:—

(i) Inspected by the Dentists:

		<i>Aged</i>		
Routine Age Groups		3 ...	64	
		4 ...	715	
		5 ...	1,778	
		6 ...	2,150	
		7 ...	2,439	
		8 ...	2,472	
		9 ...	2,589	
		10 ...	2,623	
		11 ...	2,652	
		12 ...	2,501	
		13 ...	2,362	
		14 ...	1,228	
		15 ...	99	
		16 ...	13	
Total ...				23,685
Specials	...	...	...	768
Grand Total				24,453

(ii) Found to require treatment

... 18,099

(iii) Actually treated

... 7,728*

(2) Half-days devoted to:—

Inspection	...	...	...	118
Treatment	...	...	...	1,517

Total ... 1,635

(3) Attendances made by children for treatment

... 13,378

(4) Fillings:—

Permanent teeth	...	...	...	5,072
Temporary teeth	...	...	...	239

Total ... 5,311

(5) Extractions:—

Permanent teeth	...	...	...	3,760
Temporary teeth	...	...	...	15,530

Total ... 19,290

(6) Administrations of general anaesthetics for extractions

... 7,153

(7) Other operations:—

Permanent teeth	...	...	...	1,341
Temporary teeth	...	...	...	38

Total ... 1,379

*Including 3,329 who had received treatment previously.

GROUP VI.—Uncleanliness and Verminous Conditions.

(i)	Average number of visits per school made during the year by the school nurses	2·8
(ii)	Total number of examinations of children in the schools by school nurses	51,128
(iii)	Number of individual children found unclean ...	2,998
(iv)	Number of children cleansed under arrangements made by the Local Education Authority ...	711*
(v)	Number of cases in which legal proceedings were taken:—	
	(a) Under the Education Act, 1921 ...	—
	(b) Under School Attendance Byelaws ...	—

*Including cases actually cleansed by the school nurses and cases cleansed by parents on advice given by the nurses.

SECONDARY AND HIGH SCHOOLS.

TABLE I.

RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Routine Inspections	1,469
--------------------------------------	-------

B.—OTHER INSPECTIONS.

Number of Special Inspections	185
Number of Re-inspections	379
Total	564

SECONDARY AND HIGH SCHOOLS.

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION.

DEFECT OR DISEASE				ROUTINE INSPECTIONS		SPECIAL INSPECTIONS	
				No. of Defects		No. of Defects	
				Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment
Malnutrition	...	...	...	—	—	—	—
Skin	Ringworm:	...	...	—	—	—	—
	Scalp	...	...	—	—	—	—
	Body	...	...	1	—	1	—
	Scabies	...	...	2	—	1	—
	Impetigo...	...	...	—	—	3	—
Eye	Other diseases (non-tuberculous)	...	...	2	—	4	1
	Blepharitis	...	...	2	1	—	—
	Conjunctivitis	...	...	2	—	—	—
	Keratitis...	...	...	—	—	—	—
	Corneal Opacities	...	...	—	—	—	—
	Defective Vision (excluding Squint)	...	...	124	17	11	1
	Squint	...	...	2	—	—	—
Ear	Other Conditions	...	...	2	—	3	—
	Defective Hearing	...	...	5	1	1	—
	Otitis Media	...	...	4	—	—	—
	Other Ear Diseases	...	...	3	1	—	—
Nose and Throat	Chronic Tonsillitis only	...	...	11	12	4	—
	Adenoids only	...	...	2	—	—	—
	Chronic Tonsillitis and Adenoids	...	...	2	—	—	—
	Other conditions	...	...	9	1	5	2
Enlarged Cervical Glands (Non-Tuberculous)	...	...	...	—	—	—	—
Defective Speech	...	...	...	3	1	—	—
Heart and Circulation	Heart Disease:	...	...	—	—	—	—
	Organic	...	...	4	11	—	1
	Functional	...	...	3	10	—	2
	Anaemia	...	...	1	—	—	—
Lungs	Bronchitis	...	...	—	—	—	—
	Other Non-Tuberculous Diseases	...	...	1	9	2	2
Tuberculosis	Pulmonary:	...	...	—	—	—	—
	Definite	...	...	—	—	—	—
	Suspected	...	...	—	1	1	1
	Non-Pulmonary:	...	...	—	—	—	—
	Glands	...	...	—	—	—	—
	Bones and Joints	...	...	—	—	—	—
Nervous System	Skin...	...	...	—	—	—	—
	Other forms	...	...	—	—	—	—
	Epilepsy	...	...	—	—	—	—
	Chorea	...	...	—	—	—	—
Deformities	Other Conditions	...	...	—	—	—	1
	Rickets	...	...	—	—	—	—
	Spinal Curvature	...	...	3	1	—	—
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	Other Forms	...	...	13	4	5	—
	...	...	...	25	15	20	19

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

GROUP	NUMBER OF CHILDREN		Percentage of Children found to require Treatment
	Inspected	Found to require Treatment	
Routine Inspections	1,469	204	13.9

SECONDARY AND HIGH SCHOOLS.

TABLE IV.

RETURN OF DEFECTS TREATED.

TREATMENT TABLE.

GROUP I.—*Minor Ailments (excluding Uncleanliness).*

DEFECT OR DISEASE	Number of Defects treated or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
SKIN:—			
Ringworm—Scalp	—	—	—
„ —Body	1	—	1
Scabies	—	—	—
Impetigo	3	—	3
Other Skin Diseases	1	—	1
MINOR EYE DEFECTS:—			
(External and other, but excluding cases falling in Group II)	—	—	—
MINOR EAR DEFECTS	9	—	9
MISCELLANEOUS			
(e.g., minor injuries, bruises, sores, chilblains, etc.)	—	—	—
Total	14	—	14

GROUP II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

DEFECT OR DISEASE	Number of Defects dealt with			
	Under the Authority's Scheme	By Private Practitioner or at Hospital, apart from the Authority's Scheme	Otherwise	Total
Errors of Refraction (including Squint) ...	128	1	4	133
Other Defect or Disease of the Eyes (excluding those recorded in Group I) ...	2	—	—	2
Total ...	130	1	4	135

DEFECT OR DISEASE	Number of Children for whom Spectacles were			
	Prescribed		Obtained	
	Under the Authority's Scheme	Otherwise	Under the Authority's Scheme	Otherwise
Errors of Refraction (including Squint) ...	119	5	113*	5

* Including 5 free of charge.

GROUP III.—Treatment of Defects of Nose and Throat.

	Number of Defects			
	Tonsils only	Adenoids only	Tonsils and Adenoids	Other Defects
Received Operative Treatment— Under the Authority's Scheme, in Clinic or Hospital ...	—	—	8	—
By Private Practitioner or Hospital, apart from the Authority's Scheme	—	—	—	—
Total ...	—	—	8	—
Received other forms of treatment ...	13			
Total number treated ...	21			

GROUP V.—Dental Defects.

(1)	Number of Children who were:—					
	(i) Inspected by the Dentists:					
	Specials	...	...	...	...	762
	(ii) Found to require treatment	...	...	...	...	755
	(iii) Actually treated	...	...	...	...	784*
(2)	Half-days devoted to:—					
	Inspection	...	...	...	†
	Treatment	...	...	...	†
				Total	...	†
(3)	Attendances made by children for treatment	...	...	...	...	2,155
(4)	Fillings:—					
	Permanent teeth	...	...	...	1,403	
	Temporary teeth	...	...	...	1	
				Total	...	1,404
(5)	Extractions:—					
	Permanent teeth	...	...	...	613	
	Temporary teeth	...	...	...	140	
				Total	...	753
(6)	Administrations of general anaesthetics for extractions	...	...	...	...	431
(7)	Other operations:—					
	Permanent teeth	...	...	...	636	
	Temporary teeth	...	...	...	—
				Total	...	636

* Including 504 who had received treatment previously.

† Special sessions are not devoted to inspection and treatment of secondary and high school children; the numbers of sessions devoted to inspection and treatment of all children are shown on page 122.

MENTAL DEFICIENCY SERVICE.

The mentally defective persons under the care of the Mental Deficiency Committee are classified according to sex, age and form of mental defect in the tables given below. It will be seen on reference to Table III that the total number of ascertained defectives for the care of whom the Committee were responsible at the end of 1933 was 521—an increase of 16 over the number at the end of the previous year. Of the total number of cases, 196 were in institutions or under statutory guardianship, the institutions in which they were placed being shown in Table VII. The number of ascertained cases remaining at home was 321, of whom 223 were under statutory supervision and 98 under voluntary supervision; 4 remained to be appropriately dealt with.

The urgent need for additional institutional accommodation, referred to in previous reports, has been relieved to some extent by the recent re-arrangements made at the Cardiff Public Assistance Institution (Ely Lodge), whereby the accommodation has been increased and approved for the reception of 63 additional cases, viz., 32 males and 25 females under the age of 16 years and 6 cot and chair cases under 16 years. The accommodation at Hensol Castle Certified Institution, Glamorgan, is likely to be increased from 100 to 360 places during 1934, but there are now virtually no Cardiff cases who are suitable for admission to that institution requiring removal urgently.

TABLE I.

SUMMARY OF THE YEAR'S WORK.

(1) Cases examined for the first time:—

					<i>Males.</i>		<i>Females.</i>		<i>Totals.</i>
Idiots	...	...	...	...	2	...	—	...	2
Imbeciles	...	...	...	...	6	...	3	...	9
Feeble-minded	...	...	...	...	15	...	15	...	30
Not mentally defective	...	...	...	...	2	...	3	...	5
Totals				...	25	...	21	...	46
(2) Re-examinations	...	...	...	...	74	...	19	...	93
(3) Removed from list of ascertained cases under supervision at home—									
(i) Removed to Institutions at instance of Local Authority—									
(a) Obligatory	...	...	...	...	6	...	—	...	6
(b) Permissive	...	...	...	...	—	...	—	...	—
(ii) Removed to Institutions at instance of Public Assistance Committee—									
(a) Under Lunacy Orders	...	...	...	...	1	...	3	...	4
(b) Other cases	...	...	...	...	—	...	—	...	—
(iii) Removed to Mental Hospitals	...	...	...	...	1	...	1	...	2
(iv) Deceased	...	...	...	...	5	...	3	...	8
(v) Left Cardiff	...	...	...	...	2	...	1	...	3
(vi) Not certifiable	...	...	...	...	1	...	—	...	1
Totals				...	16	...	8	...	24

Table I continued—Summary of the Year's Work.

				Males.		Females.		Totals.
(4)	Removed to Institutions (not previously under supervision at home)	...	...	4	...	—	...	4
(5)	Total number removed to Institutions or placed under Guardianship at the instance of Local Authority	...	...	10	...	—	...	10
(6)	Transferred from one Institution to another			13	...	7	..	20
(7)	Transferred from Guardianship to Institution			—	...	1	...	1
(8)	Institution cases that ceased to be chargeable to the Local Authority:—							
	(i) Deceased	...	...	2	...	4	...	6
	(ii) On licence	...	...	1	...	—	...	1
	Totals	...	...	3	...	4	...	7

(9)	Instances in which licence from Institutions was granted	...	...	2	...	1*	...	3
(10)	Instances in which cases on licence were returned to Institutions	...	...	1	...	—	...	1
(11)	Visits paid by Visiting Officer	...	...	...	...	...	...	2.165

*Died in hospital to which transferred for treatment.

TABLE II.

SOURCES OF ASCERTAINMENT OF CASES EXAMINED FOR FIRST TIME.

Source of Ascertainment	Idiots	Imbeciles	Feeble-minded	Not Mentally Defective	Totals
Local Education Authority	...	7	24	...	31
Public Assistance Department	...	2	1	2	6
Probation Officers	1	1
Institute for the Blind	1	...	1
Cardiff Royal Infirmary	1	1	2
Private Medical Practitioner	1
An Institution for Girls	2	...	2
Parents, Guardians or Relatives	1	...	1
Officers of Public Health Department	1	1
Totals	2	9	30	5	46

TABLE III.

POSITION AT 31st DECEMBER, 1933.

			<i>Males.</i>		<i>Females.</i>		<i>Totals.</i>
(1)	Obligatory Cases:—						
	(a) In Institutions ...	...	94	...	75	...	169*
	(b) Under Guardianship ...	...	3	...	3	...	6
	(c) On Licence from Institution ...	...	7	...	1	...	8
(2)	In "places of safety" ...	...	—	...	—	...	—
(3)	Cases in regard to whom the Local Authority contributes under permissive powers:—						
	(a) In Institutions ...	...	5	...	5	...	10
	(b) Under Guardianship ...	...	—	...	—	...	—
	(c) On Licence from Institution ...	...	—	...	1	...	1
(4)	Cases removed by parents or guardians in regard to whom the Local Authority does not contribute:—						
	(a) In Institutions ...	...	2	...	—	...	2
	(b) Under Guardianship ...	...	—	...	—	...	—
	Totals	...	111	...	85	...	196
(5)	Cases in Institutions under Lunacy Orders ascertained to be mentally defective:—						
	(a) Ely Lodge ...	...	38	...	42	...	80
	(b) Mental Hospitals ...	...	4	...	6	...	10
	Totals	...	42	...	48	...	90
(6)	Cases at home — ascertained to be defective:—						
	(a) Under Statutory Supervision ...	...	120	...	103	...	223
	(b) Under Voluntary Supervision ...	...	39	...	59	...	98
	Totals	...	159	...	162	...	321
(7)	Attending Occupation Centre— ⁱ included in (6):—						
	(a) Under Statutory Supervision ...	...	17	...	9	...	26
	(b) Under Voluntary Supervision ...	...	—	...	—	...	—
	Totals	...	17	...	9	...	26
(8)	Attending Training Centre:—						
	(a) Under Statutory Supervision— ⁱ included in (6) ...	...	12	...	13	...	25
	(b) Under Voluntary Supervision— ⁱ included in (6) ...	...	1	...	1	...	2
	(c) On Licence from Institution— ⁱ included in (1) ...	...	1	...	—	...	1
	(d) Under Guardianship— ⁱ included in (1) ...	...	1	...	1	...	2
	Totals	...	15	...	15	...	30

*Including 14 cases (6 males and 8 females) maintained by the Board of Control.

Table III continued—Position at 31st December, 1933.

(9) "Subject to be dealt with" but action not yet taken :—		Males.		Females.		Totals.	
(a)	Notified by Education Authority ...	2	...	2	...	4	
(b)	Otherwise ascertained ...	—	...	—	...	—	
Totals ...		2	...	2	...	4	
(10) Under consideration but not ascertained to be defective ...		4	...	1	...	5	

TABLE IV.

CLASSIFICATION OF KNOWN CASES.

	In Institutions or under Guardianship (including cases on licence, etc.)			Under Supervision at Home		
	Males	Females	Totals	Males	Females	Totals
Idiots ...	11	7	18	11	5	16
Imbeciles ...	42	22	64	56	62	118
Moral Defectives ...	1	1	2	...	1	1
Feeble-minded ...	56	54	110	90	94	184
Post-encephalitic Deterioration ...	...	1	1	1	1	2
Unclassified or not examined ...	1	...	1	7	2	9
Totals ...	111	85	196	165	165	330

TABLE V.

AGES OF CASES IN INSTITUTIONS OR UNDER GUARDIANSHIP
(INCLUDING CASES ON LICENCE, ETC.)

Ages— Years	Idiots		Imbeciles		Moral Defectives		Feeble-minded		Post-encephalitic Deterioration		Unclassified		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
7	1	...	1	...	...	...	...	...	...	...	...	...	2
9	2	...	...	...	...	...	...	...	...	...	...	...	2
10	...	...	1	...	...	...	...	...	...	...	...	...	1
11	1	...	...	2	...	...	...	...	...	...	...	...	3
12	...	...	1	...	...	...	1	...	...	...	...	...	2
14	...	...	3	...	...	...	...	...	...	...	...	...	3
15	...	1	1	...	...	...	...	...	...	...	...	...	2
16	...	1	1	3	...	...	2	...	...	...	...	...	7
17	1	1	2	...	...	...	1	...	...	...	...	...	5
18	1	...	1	...	...	...	3	2	...	...	...	...	7
19	...	...	6	1	...	...	2	2	...	...	...	...	11
20—25	2	2	10	4	...	...	18	12	...	1	1	...	50
25—30	2	...	6	5	1	1	19	16	...	...	...	...	50
30—40	1	1	7	6	...	...	10	17	...	...	...	...	42
Over 40	...	1	2	1	...	...	...	5	...	...	...	...	9
Totals	11	7	42	22	1	1	56	54	...	1	1	...	196

TABLE VI.

AGES OF CASES UNDER SUPERVISION AT HOME.

Ages— Years	Idiots		Imbeciles		Moral Defectives		Feeble- minded		Post- encephalitic Deterioration		Unclassified or Not Examined		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	
4	...	...	...	...	...	...	...	...	...	...	1	...	1
5	...	...	...	...	...	...	...	...	...	...	2	...	2
6	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	1	1	...	...	...	...	...	...	...	...	2
8	...	1	4	2	...	...	...	...	...	1	...	...	8
9	...	...	3	4	...	...	...	...	...	...	...	...	7
10	1	...	1	3	...	...	1	...	...	...	...	...	6
11	1	1	1	2	...	...	1	3	...	...	...	...	9
12	...	...	3	2	...	...	2	...	...	...	...	...	7
13	2	...	3	5	...	...	2	...	...	...	...	...	12
14	...	1	7	3	...	...	6	...	...	...	...	...	17
15	...	1	2	2	...	...	2	4	...	...	...	...	11
16	1	...	4	...	...	...	6	7	...	...	...	...	18
17	1	...	2	2	...	...	9	6	...	...	...	...	20
18	2	...	4	3	...	...	9	4	...	...	...	...	22
19	...	...	2	1	...	...	6	6	...	...	...	...	15
20—25	1	1	8	14	...	...	22	17	...	...	1	...	44
25—30	1	...	4	6	...	1	10	18	1	...	3	...	44
30—40	...	...	6	11	...	...	11	17	...	...	...	2	47
Over 40	1	...	1	1	...	...	3	12	...	...	...	...	18
Totals	11	5	56	62	...	1	90	94	1	1	7	2	330

TABLE VII.

CASES IN INSTITUTIONS OR UNDER GUARDIANSHIP.

(a) Obligatory Cases.

NAME OF INSTITUTION, Etc.	Idiot	Imbeciles	Moral Defectives	Feeble-minded	Post-encephalitic Deterioration	Unclassified	Totals
(a) Institution Cases:—							
Besford Court Catholic Mental Welfare Home, Worcester	4	...	...	4
Brentry Certified Institution, Westbury-on-Trym	2	...	...	2
Cardiff Public Assistance Institution, Ely, Cardiff	14	28	...	23	...	...	65
Carnarvon Public Assistance Institution, Bodvan	2	...	...	...	...	2
Drymma Hall, Skewen, Nr. Neath	1	...	...	1
Etloe House, Leyton, Essex	2	...	...	2
Girls' Village Homes, Barkingside, Essex	1	...	...	1
Henol Castle Certified Institution, Nr. Pontyclun, Glam.	4	...	6	...	...	10
Hillside Institution, Buntingford	2	...	...	2
Hortham Colony, Bristol	1	2	1	23	...	...	27
House of Help, Bath	2	...	...	2
Monkton Hall Home, Jarrow-on-Tyne	1	...	...	1
Mount Tabor Certified Institution, Basingstoke, Hants	3	...	...	3
Newtown and Llanidloes Public Assistance Institution, Caersws	3	...	...	...	...	3
Field Heath House, Hillingdon, Uxbridge	1	...	...	...	...	1
Rampton State Institution, Retford	2	1	9	1	1	14
Rock Hall House, Combe Down, Bath	1	...	...	...	...	1
Royal Earlswood Institution, Redhill	1	...	...	1
Ruthin Public Assistance Institution, Denbigh	1	...	...	1
St. Elizabeth's Home for Epileptics, Much Hadham, Herts	3	...	...	3
St. Joseph's Home, The Croft, Sudbury	1	...	...	1
St. Mary's Home, Painwick, Stroud, Glos.	2	...	...	2
St. Raphael's Colony for Epileptics, Barvin Park, Herts	1	...	...	1
St. Teresa's Home, Lewisham	3	...	...	3
Seafeld House, Seaforth, Nr. Liverpool	2	...	...	2
Stoke Park Colony, Stapleton, Bristol	14	...	8	...	...	22
(b) Guardianship Cases:—							
Central Association for Mental Welfare, London	1	...	...	...	...	1
Under Guardianship of Parents	1	...	3	...	...	4
Approved Homes	1	...	...	1
Totals	15	59	2	105	1	1	183

(b) Permissive Cases.

NAME OF INSTITUTION, Etc.	Idiots	Imbeciles	Feeble-minded	Totals
Brentry Certified Institution, Westbury-on-Trym ...	...	1	...	1
Cardiff Public Assistance Institution, Ely, Cardiff ...	2	1	2	5
Etloe House, Leyton, Essex ...	...	...	1	1
Hortham Colony, Bristol ...	...	...	1	1
Newtown and Llanidloes Public Assistance Institution, Caersws ...	1	1	...	2
Royal Earlswood Institution, Redhill ...	...	2	...	2
Stoke Park Colony, Stapleton, Bristol ...	...	...	1	1
Totals ...	3	5	5	13

TABLE VIII.

CASES REQUIRING EARLY REMOVAL TO INSTITUTIONS OR REQUIRING ALTERNATIVE INSTITUTIONAL ACCOMMODATION AS AT 31st DECEMBER, 1933.

	Cases at Home				Cases unsuitably placed in Institutions		Totals		
	Parents willing for removal		Parents unwilling for removal						
	M	F	M	F	M	F	M	F	Both Sexes
Idiots ...	1	...	9	7	6	7	16	14	30
Imbeciles ...	1	2	29	31	10	12	40	45	85
Feeble-minded ...	1	...	30	19	9	7	40	26	66
Post-encephalitic Deterioration ...	..	..	1	..	1	1	2	1	3
Totals ...	3	2	69	57	26	27	98	86	184